CONSTRUCTION NEWS

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RAILWAYS.

(*D s that this work is advertised in *Engineering News.*)

A SON, TOPEKA & SANTA FE. R. R.—The San Angelo line will be extended from San Angelo to Pecos, Tex., where connection will be made with the Pecos & Northern Division. W. H. Wagner, Amarillo, Tex., is Asst. Ch. Engr. in charge of the work.

CHARLES CITY WESTERN R. R.—An extension is planned from Charles City, north, to Elma or Riceville. The company has recently completed a 17-mile line from Charles City to Marble Rock, Iowa, which is operated by gasoline cars. C. W. Hart, Charles City, Iowa, is Pres.

CHATTANOOGA SOUTHERN RAILWAY CO.—The construction of a new line from Round Mountain to Piedmont, Ala., is under consideration. C. H. Fish, Chattanooga, Tenn., is Ch. Engr.

CHICAGO, MILWAUKEE & ST. PAUL R. R. CO.—The belt-line project around Milwaukee, which has been brought up numerous times in the past, is again under consideration. Construction, however, will probably not be started this year. D. J. Whittemore, Chicago Ill., is Ch. Engr.

COLORADO & SOUTHERN R. R.—A joint line will probably be built by this company on the Colorado & Midland down the Blue River Valley from Dillon, Colo., to Kremmling on the Denver, Northwestern & Pacific R. R.

EL PASO & SOUTHWESTERN R. R.—Announcement has been made by Dr. James Douglas, President of this railroad, 99 John St., New York City, that the system will be extended from Benson to Tucson, Ariz., parallel to the Southern Pacific. As stated, Nov. 22, the company expects eventually to continue this line to Los Angeles, Cal. J. R. Emerson, Douglas, Ariz., is Res. Engr.

MAIN CENTRAL R. R.—Permission has been asked of the railroad commissioners to build a 6-mile detour from the main line at Mile 18 to a point about half way between Cumberland Junction and Yarmouth Junction, Me.

NEW YORK, NEW HAVEN & HARTFORD R. R.—Press reports state that the New York, New Haven & Hartford, lessees of the Central New England R. R., are considering the electrification of that line between Hartford and Winsted, Conn., about 35 miles. Edward Gagel, New Haven, Conn., is Ch. Engr.

ST. LOUIS SOUTHWESTERN R. R.—The company having finished the 25-mile extension from Gatesville to Hamilton, Tex., is well under way on the extension from Hamilton to Comanche, and will in the near future extend the line to Abilene or Sweetwater, about 100 miles.

WYOMING.—A new line is planned from Clermont to Buffalo, Wyo., 28 miles, and will probably be later extended to Casper, where it will connect with the Chicago & Northwestern. The company is known as the Wyoming R. R. Co., and W. W. Alden, Chicago, Ill., William G. Dows, Cedar Rapids, Ia., and H. P. Rothwell, Buffalo, Wyo., are interested.

ELECTRIC RAILWAYS.

NIAGARA FALLS, N. Y.—A charter has been granted to the Niagara, Welland & Lake Erie Ry Co. to build an electric railway from Niagara Falls to Welland and Port Colborne, with branch lines to Fort Erie and Port Dover. Work will be started in the near future.

PITTSBURG, PA.—Announcement has been made by Supt. Harry Etheridge, it is reported, that the Pittsburg Harmony & New Castle Ry. Co. will construct 4,000 ft. of double track north from Drogie station, and later the entire section between Pittsburg and Evans City, Pa., will be double tracked.

FAIRMONT, W. VA.—A line is projected from Fairmont, W. Va., by way of Waynesburg, to Pittsburg, Pa. D. S. Walton, Waynesburg, A. L. Moredock, W. A. Hook, and W. W. Evans are interested.

ALBANY, GA.—A franchise has been applied for by a company of Albany citizens who have completed plans to build a street-car line. S. B. Brown, W. W. Pace, F. F. Putney, C. W. Rawson, J. K. Pray and other business men of Albany are among the organizers of the company.

HODGENVILLE, KY.—J. M. Richardson and W. H. Jones, of Glasgow, Ky., petitioned the Hart Fiscal Court for an extension of time for the Louisville, Lincoln Park & Glasgow Electric R. R. Co. until March, 1912, for the construction of a line from Hodgenville to Glasgow. The extension was granted.

FRENCHBURG, KY.—The Licking Valley R. R. Co., it is reported, will build a line from Yale, Ky., to this place, about 15 miles, to be completed by May 1. Work will be light. The average grade is less than 1½%.

MADISONVILLE, KY.—Dock Fowler, of Hopkins County, is promoting a trolley line from Madisonville to Ashbysburg, a distance of 13 miles.

CINCINNATI, OHIO.—Permits have been issued by Service Director Sundmaker to the Cincinnati Traction Co. to repair its tracks. One new curve at Eighth St. and State Ave. will be installed, and one curve at Central Ave. and Seventh St. will be removed. The curves at the seven other corners will be replaced with new tracks. Thomas Elliott, Traction Bldg., Cincinnati, Ohio, is Ch. Engr.

LANCASTER, OHIO.—A company is to be incorporated with a capital of $100,000, of which $75,000 has already been subscribed. It is said that the surveys have been completed and construction of a traction line will begin about April 1 between Lancaster and Athens. E. B. Young, of Nelson, McClelland Martens, of Lancaster, and others are the incorporators.

CHICAGO, ILL.—A comprehensive report has been submitted to the Chicago City Council by Bion J. Arnold, Ch. Subway Engr., making recommendations for a subway system. The plans, which are still in a tentative stage, call for subways from the southern portal of the river terminal at the La Salle St. Junction to Clark St. and Archer Ave., as well as terminal loops for the west side surface lines connecting with Washington and Van Buren St. tunnels, at an approximate cost of $8,000,000.

The second step includes subways from the connection with the Northwestern Elevated at Franklin St. to a connection with the South Side Elevated at 12th St., which subway is to have two additional tracks for surface lines from a point near Dearborn Ave. to 13th St., and terminal loops for the Metropolitan Elevated R. R. and the Chicago Oak Park Elevated R. R., extending through Harrison St., Michigan Ave., Randolph and Madison Sts., at a cost of $21,225,000.

The third step includes a subway connecting the Metropolitan Elevated R. R. with the Chicago & Oak Park R. R., through Randolph St., Michigan Ave. and Harrison St., at a cost of $6,250,000.

The fourth step includes a subway through Newberry Ave. along 12th St. and Michigan Ave., Rush St. and Chicago Ave. to Greene St., at a cost of $9,700,000.

The fifth step includes a subway in Canal and Thompson Sts., from 12th St. to Chicago Ave.

URBANA, ILL.—The Urbana City Council has granted the Danville, Urbana & Champaign Ry. Co. a 45-year franchise to build and maintain a line from Market St., north to Cunningham Ave., to the Saline bridge.

MILWAUKEE, WIS.—The Milwaukee Western Electric Ry. Co. has secured more than 75% of its right-of-way between Milwaukee and Fox Lake, as well as franchises through intermediate towns. According to the survey, the road will later have an extension to Green Lake, and divisions from Sussex to Waukesha and from Fox Lake to Randolph. The grade will not exceed 1.3%. C. A. Chapman, 1537 Marquette Bldg., Chicago, Ill., is Ch. Engr.

CEDAR RAPIDS, IOWA.—Press reports state that a trolley line will be built out of Cedar Rapids. There will be terminals at Waterloo and Cedar Rapids. The principal towns on the proposed line are Urbana, Brandon and Jubilee.

DAVENPORT, IOWA.—Surveys are being made and construction work is about to begin on a new 20-mile extension of the Tri-City Ry. and Lt. Co., between Davenport and Muscatine, which will cost about $750,000. The company is also planning to spend $1,250,000 on other improvements, including double-tracking the lines on the principal streets of all the cities in which the company operates. J. G. White & Co., 43 Exchange Pl., New York, N. Y., are Operating Mgrs.

LAWRENCE, KAN.—The Missouri & Kansas Interurban Ry. Co. has been taken over by the McKinley system, and a plan is under consideration to add a number of lines to its system operating in southeastern Kansas. Among the projected lines are from Coffeyville to Fort Scott. This includes a branch off into Missouri to Joplin, a line about 70 miles long, from Fort Scott to Olathe; a line from Kansas City south, which will pass through Ottawa, Garnett, Iola, Humboldt, Chanute, Erie and Girard.

MANHATTAN, KAN.—The Manhattan City & Interurban Ry. Co. is securing the right-of-way for a line from Manhattan to Ft. Riley. Work will begin on the line next spring, it is reported.

IRONDALE, MO.—See item under Light, Heat and Power.

OKLAHOMA CITY, OKLA.—The Oklahoma Ry. Co. is considering a plan to increase its stock to $12,000,000, in view of building interurban lines connecting Guthrie, Oklahoma City, El Reno, Shawnee, Norman and other central Oklahoma cities. J. G. White & Co., 43 Exchange Pl., New York, N. Y., are Op. Mgrs.

FRESNO, CAL.—F. S. Granger, Vice-Pres., and W. D. Mitchell, Secy., of the Fresno, Hartford & Summit Lake R. R. Co., have secured $1,250,000 to build an interurban railroad from Fresno to Kingsbury, with a branch to Sanger, about 35 miles. By the terms of the contracts, work must begin Feb. 28. William McLean is Ch. Engr. of the Hudson Counties Construction Co.

SAN FRANCISCO, CAL.—The Board of Supervisors of San Francisco County will call for bids for the sale of $600,000 bonds on March 13, to be used for electric construction of the Geary St. electric railroad. The funds, together with those previously raised, will be expended as follows: $300,000 for track and overhead construction; $300,000 for cars; $60,000 for special track construction; $140,000 for power houses and substation; and $80,000 for buildings.

LIGHT AND POWER PLANTS.

(*Denotes that this work is advertised in *Engineering News.*)

BANGOR, ME.—Arthur B. Leach, New York, and Linwood C. Tyler, Bangor, have made application to the State Legislature for a charter for the Maine Power Co., capitalized at $1,500,000, with authority to purchase the property rights and franchises of the Bodwell Power Co. and to issue bonds for that purpose.

JAFFREY, N. H.—A bill has been passed by the State Legislature, authorizing this town to build and maintain an electric light and power plant.

LUDLOW, MASS.—A plan to extend the electric lighting system into eastern Ludlow is being considered by the Central Massachusetts Electric Co. Electricity will be furnished for lamps and motors.

STERLING, MASS.—It is reported an electric light system will be installed here.

WESTPORT, CONN.—The Westport Water Co., is planning to double its present electrical equipment.

BINGHAMTON, N. Y.—The City Council is contemplating issuing $158,000 of bonds, to establish a municipal electric light plant in Binghamton.

FULTON, N. Y.—A franchise has been applied for by the Oswego River Power Transmission Co., Syracuse, to erect a transmission system for distributing electricity for lamps, heat and motors. Eugene M. White is the attorney.

LOCKPORT, N. Y.—The Lockport Light, Heat & Power Co., will issue $70,000 in bonds for improvements and extensions.

LYONS, N. Y.—The Crowell-Sherman Stalter Co., is considering a plan to build an electric power plant, it is reported.

NEW YORK, N. Y.—Bids will be received by Kingsley L. Martin, Comr. of Bridges, until 2 p. m., March 9, for the installation of the electrical equipment of the conduit tracks and the construction of the track extention on the plaza of the Queensboro bridge over the East River, between the Boroughs of Manhattan and Queens.

Bids will be received by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, until 3 p. m., March 6, for Item 4, installing steam boilers, etc., in additions to Erasmus Hall High School, on the easterly side of Flatbush Ave., about 205 ft. north of Grand St., Boro. of Brooklyn.

Bids will be received until 3 p. m. March 6, by C. B. J. Snyder, Supt. of School Bldgs., Dept. of Education, for installing heating and ventilating apparatus and installing temperature regulation in new Public School 46, on the northerly side of 196th St., between Briggs and Bainbridge Aves., Boro. of The Bronx.

OLEAN, N. Y.—A municipal lighting plant is contemplated. A conduit system is also under consideration. John Gaynor is City Engr., and George M. Lundy is City Engr.

YONKERS, N. Y.—The Common Council has approved specifications for a 5-year contract for lighting the public streets with gas and has directed Bd. of Contract and Supply to advertise for bids for furnishing the light.

SOUTH ORANGE, N. J.—A three-story factory, 50 × 100 ft., and a power house are being built here by the Sillcocks-Miller Co. A power plant will be installed also a ventilating system. W. S. Sillcocks is Pres.

DILLSBURG, PA.—The Dillsburg Electric Light & Power Co., is raising $20,000 by a bond issue. The funds will be used for extensions and improvements.

PITTSBURG, PA.—The Joplin & Pittsburg R. R. Co. is considering plants for the construction of a power house. The company also expects to purchase a generator with a rating of about 400 KW., an engine rated at about 600 HP. and a 150-HP. boiler. W. A. Satterlee is Gen. Mgr.

WASHINGTON, D. C.—Bids will be received until Feb. 27 at the office of the Chief Signal Officer, War Department, Washington, D. C., for furnishing 300 miles of field wire. For further information address Capt. A. S. Cowan, purchasing officer.

WAVERLY, VA.—The city has voted $7,000 of bonds for the construction of an electric light plant and street improvements.

WILMINGTON, N. C.—The Tidewater Power Co., is planning extensions and improvements. One 500-KW. rotary converter, one 500-HP. boiler and 200-KW. lighting transformers will be installed, the boiler capacity will be increased 50 per cent. The 150-KW. concerter now in use will be transferred to the substation at Wrightsville Sound. A. B. Skelding, Wilmington, is Gen. Mgr.

ATLANTA, GA.—Water-power sites have been secured by the Georgia Power Co. to furnish 200,000 HP. to Atlanta and the surrounding territory. C. Elmer Smith is Pres. The company is capitalized at $10,000,000.

TALLULAH, GA.—The Georgia Power Co. will soon begin work on the hydroelectric development at Tallulah Falls, according to press reports. The work will include the erection of a dam 100 ft. high and a tunnel 1¼ miles long, to secure 600 ft. fall; construction of steel towers to carry transmission lines to Atlanta, Ga., 90 miles distant, where a large distributing station will be erected. Electricity will be transmitted at 11,000 volts; a distributing station will also be erected near Tallulah and electricity transmitted over 300 miles of wire; machinery will include six electric generators having a rating of 15,000 KW. each. All contracts will be awarded through the Northern Contracting Co., Detroit, Mich., and New York, N. Y. C. Elmer Smith, of York, Pa., is Pres. of the company. C. O. Lenz, 71 Broadway, New York, N. Y., is Engr.

LIVE OAK, FLA.—The Live Oak Electric Co., recently organized, has purchased according to press reports, the local electric light plant. Harry J. Wood is Pres. and Treas.; C. E. Jones, Vice Pres., and A. Lee Humphreys, Secy.

DOTHAN, ALA.—The output of the municipal electric plant will be doubled, according to press reports. B. R. Pilcher is manager.

MANY, LA.—Plans are being prepared by the Many Ice, Water & Light Co. for the erection of a power plant in Many. W. C. Roaten is Pres.; W. Robinson is Gen. Mgr.

CLEVELAND, OHIO.—Bids will be received at room 103 City Hall, Cleveland, Ohio, until Feb. 24, for a 50,004 gal. gasoline, engine or auto gas for the street lighting dept. 3,500 16 in. glass globes for the street lighting dept.; 500 14 in. glass globes for the street lighting dept.; 80,000 ordinary single weave cap mantles for the street lighting dept. Plans and specifications may be seen at room 413 City Hall. A. B. Lea is Director of Pub. Service.

CLEVELAND, OHIO.—Bids will be received by John J. Boyle, Secy. Pro Tem., 425 Garfield building, Cleveland, Ohio, until March 8, for electric light fixtures for the Cuyahoga county court house. Plans and specifications may be seen at room 149, Cuyahoga county court house, Lakeside Ave., Cleveland, Ohio.

HIRAM, OHIO.—Lloyd M. Hill, proprietor of the local electric light plant has purchased the Hiram College electric light plant.

SANDUSKY, OHIO.—The Director of Public Service is securing plans and estimates for the installation of a municipal electric light plant.

BLOOMINGTON, IND.—The Indiana Legislature has made an appropriation of $10,800 for a power plant for the Indiana University.

CYNTHIANA, IND.—The Town Board has sold bonds for the erection and equipment of a new electric light plant. Bids will be asked soon.

KOKOMO, IND.—A steam heating plant will be installed by the Kokomo, Marion & Western Traction Co., in connection with its lighting plant here. George J. Marott, Indianapolis, Ind., is Pres.

LOGANSPORT, IND.—An appropriation of $15,000 has been made by the Indiana Legislature for rewiring the Northern Hospital for the Insane.

LOGANSPORT, IND.—The Central Station Engineering Co., 164 Dearborn St., Chicago, Ill., is preparing plans, press reports advise us, to improve the municipal electric light plant and system here.

JACKSON, MICH.—G. N. Lemon, Ch. Elect. Engr., Jackson, Mich., is making surveys, it is reported, for the Michigan United Rys. Co., to install electric power plants.

LOCKPORT, ILL.—Bids have been rejected by the Board of Trustees of the Sanitary District of Chicago for the installation of a transformer for the seventh unit at Lockport. Isaac Bryant, Clk., will advertise for new bids.

MOUNT CARMEL, ILL.—G. E. K. Hixson, Harrisburg, Ill., is planning to build a 5,000-HP. hydroelectric power plant with steam auxiliary near the Government dam at Grand Rapids. It is the intention of the owners, the Wabash Hydroelectric Power Co., to double the capacity within a year or two. J. B. Blackman is Pres. and G. E. K. Hixon, Harrisburg, Ill., Gen. Mgr.

NASHVILLE, ILL.—The Nashville Electric Light Co. is planning to reconstruct its system and install a steam turbine and establish a day service; 20 additional street lamps will be installed. K. A. Steinbauser is Secy. and Gen. Mgr.

CHIPPEWA FALLS, WIS.—The Chippewa Valley Electric Ry., Light & Power Co., it is reported, has given a supplemental trust deed for $2,000,000 to the Harris Trust & Savings Bank of Chicago, Ill., to provide funds for completing the power dam project at Cedar Falls, Dunn County, on the Chippewa River. The work was started with a fund of $2,000,000 obtained under a trust deed dated July 1, 1907. O. H. Ingram is Pres.

AFTON, IOWA.—The plan to install an electric light system here is being considered.

GRAND RIVER, IOWA.—The installation of an electric light plant is under contemplation. A company will be formed to operate the same.

IOWA FALLS, IOWA.—The city proposes to install an electric street lighting system of its own as an adjunct to its water supply system. Three plans are proposed: (1) to install additional boilers and a generating plant to the pumping station; (2) to build a steam power plant near the railway and use electric current for pumping and lighting; (3) to build a dam nad hydroelectric plant on the Iowa River. No engineer has been engaged. For information, address F. E. Foster, Secy Commercial Club, Iowa Falls, Iowa.

PLYMOUTH, IOWA.—A plan is under the consideration of a group of men here to build a dam in Shell Rock River to furnish power for the electric light plant.

MINNEAPOLIS, MINN.—Bids will be advertised by the City Clk. for lighting streets.

LURAY, KAN.—It is reported the installation of a water-works system and an electric light plant is contemplated.

SPEARVILLE, KAN.—The building of an electric light plant is being promoted by the Commercial Club here. Ira Hickman is also interested.

SYLVAN GROVE, KAN.—The installation of a water-works system and an electric light plant is reported to be under consideration at a cost of about $17,000.

GREAT FALLS, MONT.—The equipment of the power plant of the Great Falls Electric Properties, which were recently destroyed by fire, will be replaced. E. I. Holland, this place, is Mgr.

POLSON, MONT.—F. Faucett, Polson, is engineer for the hydroelectric power plant to be built near here, it is reported, in the spring.

BURLINGTON JUNCTION, MO.—Local residents have voted to purchase the plant of the Burlington Junction Electric Lt & Power Co., and have authorized bonds amounting to $8,500. Improvements will be made, it is stated.

IRONDALE, MO.—It is stated that James P. Ward, Irondale, is interested in the plan to build a hydroelectric power plant, also an electric railway here.

ASHDOWN, ARK.—A municipal electric light plant in Ashdown is reported to be under consideration.

CLARKSVILLE, ARK.—The electric light plant owned by E. J. Connell and recently destroyed by fire at a loss of about $35,000, will, according to press reports, be rebuilt.

BRENHAM, TEX.—The Brenham Compress Oil & Mfg. Co. is making preparations for the installation of an electric power plant to provide electricity for operating its oil mill, which will be equipped for electric motor drive. The equipment will include the following: A 300-HP. compound condensing engine, direct connected to a 250-KW. generator, switchboard and motors. The plant will be changed to 3-phase, 60-cycle, 2,300-volt system. Contracts for machinery, it is reported, have been placed.

BROWNSVILLE, TEX.—Bonds for $30,000 have been issued and the city authorities will ask for an additional $40,000 issue to provide for improvements at the municipal lighting station.

BOYNTON, OKLA. — The City Council is considering the installation of an electric light plant, water-works system and laying gas mains.

GUNNISON, COLO. — The question of installing a municipal electric light plant will be submitted to a vote at the spring election.

MILLIKEN, COLO. — The Town Trustees have granted to the Northern Colorado Power Company a franchise to supply electricity for lighting, and the Colorado Telephone Co. a franchise for the same length of time.

ROSWELL, N. MEX.—Engineers have been commissioned by the Berrendo Irrigated Farms Co., of Roswell, to prepare plans for an extension of the plant of the Roswell Electric Light & Power Co. A brick concrete building will be constructed, which will be equipped with high-power machinery and will cost $250,000.

HOPE, IDAHO.—J. H. Sierman and other citizens of Hope are considering installing an electric light and power plant. Water-power is available within the town limits.

ORFINO, IDAHO.—The Orfino Electric Co. is preparing to install a new plant about four miles from the present plant. It will be equipped with a 150-KVA. generator and a 265-HP. Leffel water turbine. Five miles of transmission line, having a potential of 6,600 volts or 10,000 volts, 3-phase, 60-cycle, will be erected first. A substation will be built here, equipped with one step-up and one step-down transformer. H. E. Shepherd is Mgr.

*PHOENIX, ARIZ.—Bids will be received by the Salt River Valley Water Users' Association, Phoenix, Ariz., until March 14, for furnishing complete, electrical apparatus for use in a plant to be built on the Salt River Project, Ariz. Particulars may be obtained by application to the office of the Salt River Valley Water Users' Association or the office of the U. S. Reclamation Service, Phoenix, Ariz. Chas. A. Van der Veer is Secy. of the Salt River Valley Water Users' Association.

*PHOENIX, ARIZ.—Bids will be received at the office of the Salt River Valley Water Users' Association at Phoenix, Ariz., until March 14, for furnishing complete two hydraulic turbines. Particulars may be obtained by application to the office of the Salt River Valley Water Users' Association or the office of the U. S. Reclamation Service, Phoenix, Ariz. Chas. A. Van der Veer is Secy of the Salt River Valley Water Users' Association.

SPOKANE, WASH.—Bids will be received by the City of Spokane until Feb. 24 for 60 call boxes, 40 signal lamps, 400 storagt-battery cells and battery rack and a switchboard. Plans and specifications are on file at the office of Chief of Police. John Gifford is Purchasing Officer.

CAMAS, WASH.—The Northwestern Electric Co. has filed a claim for a dam and power site on the North Fork of the Lewis River. This company has also made application for a 50-year franchise to supply electricity for lamps and motors here.

KOOSKIA, WASH.—Work on a dam across the Middle Fork and a power plant will begin as soon as spring freshets are over, it is stated. W. J. Bell, Newaygo, Mich., and T. H. Croswell, of Spokane, Wash., are interested.

PASCO, WASH. — The Pacific Power & Light Co. contemplates the early construction of the first unit of its distributing plant, to cost about $83,000. The cost of the plant complete is estimated ot $500,000.

TACOMA, WASH.—Hans Pederson, Seattle, was the only bidder for the entire work on the Nisqually power plant at $1,074,000. The various sub-divisions were as follows: Bridge complete, $52,500; conduit and reservoir, complete except embankment borrowed, $295,000; embankment borrowed, per cu. yd., 60 cts.; pressure pipes complete, in place except the excavation, $135,000; excavation, earth, per cu. yd., 50 cts.; excavation, rock, per cu. yd., $1.50; power-house, complete, except excavation and concrete work, $146,500; excavation earth, power-house site, per cu. yd., 50 cts.; excavation, rock, power-house site, per cu. yd., $1.50; excavation, rock, west side of reservoir, per cu. yd., $1.50; concrete A, for generator room, tail race and retaining wall below elev. 535, per cu. yd., $13; concrete B, for generator room, below elevation 535 per cu. yd., $12; reinforcing steel for generator room, tail race and retaining wall below elevation 535 in place, per lb., 4 cts.; water wheels and generators complete, in place, $120,000; electrical equipment for power-house complete, in place, $76,000; electrical equipment for substation complete, in place, $85,000; transmission line complete, in place, using stranded copper cable, $95,000; using stranded aluminum, $92,000.

HOOD RIVER, ORE.—The Watt Development Co. has been given a city franchise to use the city streets for installing a power line supplied from its site at Tucker's bridge. The new company, it is expected, will develop a much greater amount of power than it now has in use, while several projects of a smaller nature are contemplated that will call for harnessing additional sites on the river.

KLAMATH FALLS ORE.—The Klamath Falls Light & Water Co. has been granted a 50-year franchise to supply electricity for lamps and motors in Klamath Falls.

PORTLAND, ORE.—Smith, Kerry & Chase, Engrs., 611 Commercial Bldg., will receive bids for a transmission line across the Sandy River Valley, for the Mt. Hood Railway & Power Co. About 22 acres will be cleared. Specifications may be seen at the office of Mt. Hood Ry. & Power Co., this city.

VALE, ORE.—The Telluride Power Co. will, it is reported, extend the transmission line from its hydroelectric plant on the Malad River, Idaho, to Vale within the next two months. A. D. Smith, Salt Lake City, Utah, is Pur. Agt.

ELSINORE, CAL.—M. A. Gardner and M. L. Camburn have been granted a franchise to lay and operate a gas distributing system here. A test well for natural gas will be sunk.

GLENDALE, CAL.—The Southern California Gas Co. Los Angeles, has obtained a franchise for extending its mains to and through this city. About ten miles of distributing system will be laid here at a cost of $50,000.

LOS ANGELES, CAL.—The Southern California Gas Co., successors to the Domestic Gas Co., has petitioned the County Board of Supervisors of Los Angeles County for a 50-year franchise, to cover all roads and highways in Los Angeles County not now covered. The franchise will be advertised at once.

SAN FRANCISCO CAL.—Bids will be received by Maj. Geo. McK. Williamson, Con. Quartermaster, Fort Mason, Cal., until March 1 for constructing addition to power-house and installing pumping machinery at the United States Army General Hospital, Presidio, of San Francisco, Cal.

SOUTH PASADENA, CAL.—Bids will be received by William Cox, City Clk., until Feb. 27, for installing conduits, wires, posts and lamps in and along Ramona Ave., from Pine to Rollin Sts.

FORT WILLIAM, ONT.—The Directors of the Kaministiquia Power Co. have voted to spend $250,000 this Summer for enlarging the power plant.

LONDON, ONT.—The London Street Ry. Co. will install a new steam plant. C. B. King is Mgr.

OTTAWA, ONT. — C. Ross, of Ottawa, is organizing a company to develop power at Carillon and Point Fortune on the Ottawa River, between Ottawa and Montreal, under a lease granted to him by the Dominion Government in 1908.

ST. BONIFACE, MAN.—The E. B. REESE ENGINEERING CO., of Chicago, has been awarded the contract to supply this city with power at $18 per HP. up to 3,000 HP. and a reduction of 25 cts. per HP. on all over that amount.

WINNIPEG, MAN.—A contract for the generating equipment to be installed in the new power station owned by the Winnipeg Electric Ry. Co., has been awarded to the CANADIAN GENERAL ELECTRIC CO.

BRIDGES.

TIVERTON, R. I.—The cost of the necessary repairs on the bridge at Tiverton is estimated at $33,000.

ALBANY, N. Y.—Bids will be received by Charles E. Treman, Supt. Pub. Wks., until noon March 21, for Barge Canal Contract No. 87, providing for the construction of a new bridge over the Barge Canal near the Rocky Rift dam in Montgomery County.

*TROY, N. Y.—Bids will be received by the Board of Contract and Supply until 11 a. m., March 7, for repairing the Rensselaer St. viaduct. The work includes the removal and rebuilding of parts of the abutments and pier; the cutting out of members of the bridge and replacing them with new ones; reinforcing existing members; new arrangement of the fixed and expansion end-bearing shoes, etc., involving approximately the following quantities of materials and work: 135,000 lbs. of new structural, 4,400 lbs. of reinforcing steel, 90 cu. yds. old masonry to be removed, 65 cu. yds. concrete in piers and abutment, 37 cu. yds. cinder concrete in sidewalks, 514 sq. yds. wood block pavement.

UTICA, N. Y.—We are officially advised that bids will be received about April 1, for constructing a bridge over the Mohawk River, at an estimated cost of $43,000. William F. Cogley is City Engr.

SCRANTON, PA.—We are officially advised that bids will be received in about six weeks for constructing the Mulberry St. viaduct, the cost of which is estimated at $250,000. William Scheink is City Engr.

WAMPUM, PA.—The Pennsylvania R. R. Co. is planning the construction of a solid concrete bridge 900 ft. long across the Beaver River at Wampum. The bridge will have three spans 300 ft. long. Work will begin on the structure some time this spring and will be completed in 18 months. Alexander C. Shand, Philadelphia, Pa., is Ch. Engr. of Bridges

EASTON, MD.—See item under Streets and Roads.

DANVILLE, VA.—Bids will soon be received for the construction of the $40,000 concrete bridge over the Dan River at Union St. J. O. Magruder is City Engr and Wilbur J. Watson, Citizens' Bldg., Cleveland, Ohio, is Consult Engr.

CASTLE HAYNE, N. C.—A. D. O'Brien, of Wilmington, N. C., is preparing plans for a steel drawbridge to be built over the Northeast River at Castle Hayne. The structure will be 400 ft. long and will cost $50,000.

CONWAY, S. C.—We are officially advised that the contract for constructing a steel bridge across the Waccamaw River, near Conway, was awarded on Feb. 16 to the SOUTHERN BRIDGE CO. Noted on Feb. 2.

JACKSONVILLE, FLA.—Bids will be received by G. S. Ackerly, City Recdr., until Feb. 27, for constructing a bridge over Hogans Creek.

SELMA, ALA.—The contract for constructing 23 bridges over creeks and branches in various parts of Dallas County has been awarded to the CONVERSE BRIDGE CO., of Chattanooga, Tenn., at $13,313.

CELINA, OHIO.—Bids will be received by J. S. Morrow, County Audr., until Feb. 23 for furnishing all material and performing all the work for a steel superstructure for a bridge over the Wabash River and known as the Post Bridge one span 125 ft. long with a 14-ft. roadway to be built according to plans and specifications on file in the Auditor's office of said County.

DAYTON, OHIO.—Tentative plans are being prepared for a bridge to replace the structure at Koewee St. The estimated cost of a girder bridge is $65,000 and of a Melan type bridge $80,000. F. J. Cellarius is City Engr.

HAMILTON, OHIO.—Bids will be received by the Commissioners of Butler County until 10 a. m., March 11, for constructing a road fill and the superstructure of a bridge in Reily Township. Plans and specifications are on file with J. E. Brate, County Audr.

OBERLIN, OHIO.—Bids will soon be received for the construction of 20 new bridges in various parts of Lorain County at an estimated cost of $23,585. The bridges to be built are: The Campbell bridge, in Carlisle; Watkins bridge, Camden; Spring St. bridge, Oberlin; Wise bridge, Grafton; Strong's Corners bridge, Brownheim; Bannish bridge, Grafton; Fiebach bridge, Brownhelm; Haskell bridge, Wellington; Kothe bridge, Henrietta; F. Twining bridge, Camden; Bassett bridge, Russia; Morgan St. bridge, Oberlin; Kingsley Corners bridge, Grafton; Mosier bridge, Brighton; Royce bridge, Huntington; Griggs bridge, Huntington, and the Hand bridge, Camden.

YOUNGSTOWN, OHIO.—Official advices are to the effect that the city is considering the construction of several overhead bridges. Frank Lillie is City Engr.

INDIANAPOLIS, IND.—Bids will be received by the Commissioners of Marion County until 10 a. m., Feb. 24, for constructing a bridge over Crooked Creek. Albert Sahm is County Audr.

VINCENNES, IND.—Bids will be received by the Board of Commissioners of Knox County until 10 a. m., March 9, for erecting and completing three bridges in Knox County. John T. Scott is County Audr.

CLINTON, ILL.—Bids will be received at the office of the Clerk of De Witt County, until Feb. 25, for constructing ten farm bridges of 20-ft. span and 12-ft. roadway.

PARIS, ILL.—Bids will be received within the next few weeks for the construction of a bridge over Sugar Creek on the State Line road. The cost of the structure will be shared by Vigo County, Edgar County and Elbridge Township.

CHIPPEWA FALLS, WIS.—The cost of constructing the new bridge across Chippewa River has been estimated at $90,000 for concrete and from $56,675 to $65,000 for steel.

MARINETTE, WIS.—Bids will be received until Feb. 23 for constructing a steel span bridge with concrete floor to cost $25,000, over the Menominee River at Hattie St.

IDAGROVE, IOWA.—Bids will be received by the Board of Supervisors until April 3 for constructing steel bridges in Ida County.

NEVADA, IOWA.—Bids are being received by the County Auditor for the construction of reinforced-concrete arch bridges to cost $10,000.

DUNDAS, MINN.—Bids [illegible] received by R. L. Shandorf, Town [illegible] until 11 a. m., Feb. 28, for building [illegible] in the village of Dundas across [illegible] channel of the Cannon River on [illegible] St. to replace the old wooden bridg[illegible]

ASHLAND, NEB.—A steel [illegible] will be constructed over the Platte [illegible] at Ashland. A stock company is [illegible] formed to build the structure. [illegible] Pres. Farmers and Mercha[illegible] is interested.

MUSKOGEE, OKLA.—Pres[illegible] are to the effect that the County E[illegible] is making surveys, plans, and speci[illegible] for the construction of 33 bridges in [illegible] parts of Muskogee County.

PORTLAND, ORE.—Bonds [illegible] $2,000,000 have been voted for the co[illegible] of a high bridge at Broadway. No[illegible] Feb. 2. The city is considering th[illegible] of a bridge to join Sherma[illegible] on the West Side with Division St[illegible] East Side. The estimated cost of [illegible] is $1,900,000.

SALEM, ORE.—The Salem [illegible] Western Ry. is considering the [illegible] of a bridge over the Willam[illegible] River [illegible] cost $100,000.

AUBURN, CAL.—A new steel [illegible] suspension bridge will be construct[illegible] North Fork of the American [illegible] Auburn and Forest Hill Road, [illegible] of the old bridge. The Placer C[illegible] Board of Supervisors has authorized [illegible] Clerk to advertise for bids on [illegible] kinds of bridges.

PASADENA, CAL.—The Board [illegible] Supervisors of Los Angeles County [illegible] voted to appropriate a sum, not to ex[illegible] 000, as the county's share in th[illegible] proposed West Colorado St. bridge to span [illegible] Arroyo Seco.

SOUTH PASADENA, CAL.—Bid[illegible] be received by the city until 2 p. m., [illegible] 6, for constructing a 6-arch concre[illegible] bridge, 600 ft. long.

SWAN RIVER MAN.—Bids wi[illegible] received until April 15 by Joseph Ar[illegible]strong, Secy. and Treas., for the supply [illegible] erection of one 94-ft. steel riveted Pra[illegible] truss bridge with steel stringers and 3-in. [illegible]amarac flooring.

BUILDINGS.

(*Denotes that this work is adver[illegible] in Engineering News.)

BARRE, VT.—Bids were received as follows, on Feb. 14, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Barre, Vt.: Ambrose D. Stannard, New York, $79,000; M. P. Wells, Philadelphia, Pa., $75,071; Merrick Fireproofing Co., New York, $84,800; Charles H. Peckworth, New York. $85,480; Plowman Construction Co., Philadelphia, Pa., $77,377; Westchester Engineering Co., New York, $76,900; Amity Construction Co., New York, $76,300; J. E. & A. L. Pennock, Philadelphia, $78,787; Thomas J. Buckley, New York, $79,800; William H. Fissell & Co., New York, $81,743; King Lumber Co., Charlottesville, Va., $79,800; Conners Bros. Co., Lowell, Mass., $76,400; Woodbury & Leighton, Boston Mass., $82,900.

BOSTON, MASS.—The following bids were received, Feb. 17, by Charles Logue, Chn. School House Comn., for a school house. No award has yet been made, the two bids for limestone for artificial stone trimmings being Hooper-Waters Co., $81,657, $80,657; A. Varnerin Co., Inc., $82,331, $81,331; C. S. Cunningham Sons Construction Co., $84,390, $83,124; Conners Brothers, $87,910, $87,510; J. F. Rooney, $93,790, $93,319; Walsh Brothers, $95,000, $94,000.

Authority is being sought from the Legislature to build a bathhouse and gymnasium at Teneau Beach. Proposed cost, $100,000. Michael J. Murry, Brigham's Hotel, is its promoter.

An administration building is planned for the use of the Massachusetts General Hospital. A country branch for the hospital, to be located at Waverly, is also proposed. Dr. Frederick A. Washburn is Resident Physician.

The construction of a new hotel is proposed at Arlington and Newbury Sts. It is to be 100 ft. in height, and to contain 250 rooms. Estimated cost, $2,500,000. Coffin & Faber, 24 Milk St., are the promoters.

TYNGSBORO, MASS.—A bequest has been provided for the erection of a public library, to be called the Bennet Library. Frederick Blanchard is Chn. of Trustees.

PROVIDENCE, R. I.—Bids will be received until Feb. 25 by Henry Fletcher, Chn. Bd. of Contract and Supply, for reconstructing the Courtland St. Primary School. Martin & Hall, Union Trust Bldg., Providence, are Archs.

BRIDGEPORT, CONN.—The city has purchased a lot 100 × 149 ft. on Putnam St., as a site for a new fire engine house. An architect will be selected at once to prepare plans for the new building.

STAMFORD, CONN.—The Citizens Savings Bank has purchased a site, 25 × 100 ft., at corner of Bank and Atlantic Sts., on which to erect a building the first floor of which will be used for their banking business. Walter E. Houghton is Secy.

BUFFALO, N. Y.—The City Council has ordered the erection of a 16-room brick school building in district No. 13 Oak and Genesee Sts. and directed the Commissioner of Public Works to prepare plans and specifications and advertise for bids.

The City Council has published notice that it intends to erect a Technical High School building on the site purchased at Clinton, Eagle and Cedar Sts. and has directed the Commissioner of Public Works to prepare plans and advertise for bids.

ITHACA, N. Y.—Gibb & Waltz are completing plans and will ask for bids in about three weeks for a theatre building, 64 × [illegible] ft. 1-story and basement, steel, terra cotta and rough cast-cement to be erected on Seneca St., by F. H. and J. H. Howe.

CANANDAIGUA, N. Y.—The contract has been awarded [illegible] to the KING LUMBER CO., Charlottesville, Va., to erect the U. S. post-office here [illegible] $60,017.

BUFFALO, [illegible] Y.—Bids deferred since last Summer will be received this week for the Main building of Canisin College, 200 × 311 ft., three [illegible] and basement, fireproof, to be erected [illegible] Main and Jefferson Sts. and Hughes A[illegible].

Plans [illegible] been completed by Max G. Beierl, Ar[illegible] 371 Pearl St. Rev. Augustine Miller is [illegible]or, 675 Washington St. Estimated co[illegible] $150,000.

MALONE, N. Y.—Bids will be received until Ap[illegible] by J. F. Wright, Pres. of the Board of Education for the construction of an addition to the Franklin Academy, Williams & [illegible]nson, Ogdenburgh, prepared the plans. [illegible]stimated cost is $50,000.

MIDDLEPORT, N. Y.—The taxpayers of the village [illegible] favorable action this week toward [illegible]ring a site and erecting a high school [illegible]ding.

NEW [illegible]HELLE, N. Y.—Common Council has de[illegible] to erect modern fire house on Drake [illegible] for the Neptune Fire Co.

NEW [illegible]RK, N. Y.—Plans are being prepared [illegible] Moore & Landsiedel, 148th St. and Third A[illegible] for the construction of a 5-story flat on [illegible]ales Ave., 75 ft. north of 145th St. Michael [illegible]arrone, 357 East 116th St. is the owner. The estimated cost is $50,000.

Plans are being prepared by Nast & Springsteen, [illegible] West 45th St., for the construction of two [illegible]-story flat buildings, 50 × 90 ft., in Second St., 60 ft. west of Roebling St. The estimated cost is $80,000.

Wm. E. Austin, 46 West 24th St, has prepared plans for the construction of a 7-story brick and stone hospital, 36 × 206 ft., to be erected at 16th St. The Department of Health, 55th St. and Fifth Ave., is the owner. The estimated cost is $275,000.

Bids will be received by C. B. J. Snyder, Supt. of School Bldgs. Dept. of Education Bldg., until 3 p. m., March 2, for the general excavation, etc. (Contract No. 1), for the first portion of the new Normal College buildings (the Thomas Hunter Hall), on the Westerly side of Lexington Ave., between 68th and 69th Sts.

Three 5-story tenement buildings will be erected on the north west corner of 185th St. Harry T. Howell, 149th St. and Third Ave., is the Arch. Carmine Cioffi, 116 Intervale Ave., is owner. The estimated cost is $117,000.

NORTH TONAWANDA, N. Y.—Julius D. Schultz, 185 Delaware St. is having plans prepared for a large business block which he will erect on Webster St.

PEEKSKILL, N. Y.—The Village Board of Trustees has authorized the House Com. and Counsel to prepare a bill authorizing Board to issue bonds on vote of people for erection of a municipal building. W. D. Lockwood, Engr., has presented plans for $45,000 structure. Isaac H. Smith is Pres. Bd.

POUGHKEEPSIE, N. Y.—Percival M. Lloyd, Fallkill Bldg., is preparing plans for the construction of a brick addition and remodeling the Nelson House at 26-34 Market St. Estimated cost is $100,000. Horatio N. Bain is the owner.

ROCHESTER, N. Y.—The congregation of Bnai David and Chevra Chayteem contemplate the erection of a synagogue to cost approximately $50,000 and will soon engage architect to prepare plans. N. N. Feinstein, 210 Granite St. is Secy., of Bldg. Com.

RYE, N. Y.—The Directors of the Rye Free Reading Room have decided to erect a library building to cost from $30,000 to $50,000, according to kind of material and interior finish. George D. Barron is a Director.

*TOMPKINSVILLE, N. Y.—Bids will be received at the office of the Lighthouse Inspector, Tompkinsville, until 3 p. m., March 22, for labor and material necessary to construct a brick dwelling of reinforced concrete. Plans and specifications may be obtained from the Lighthouse Inspector, Tompkinsville.

WHITE PLAINS, N. Y.—The Board of Supervisors passed a resolution directing Legislative Committee to draft a bill providing for erection of a Normal School in Westchester County at State expense.

WHITE PLAINS, N. Y.—The American Yacht Club, Milton Point, has approved plans for the erection of a new club house. The estimated cost is $100,000.

YONKERS, N. Y.—Permits have been granted to the American Real Estate Co. for erection of houses on Park Hill, costing about $57,000.

NEWARK, N. J.—It is reported that George E. Mauert will erect at Broad and Lafayette Sts., a 15-story hotel. The estimated cost is about $1,000,000.

NEWARK, N. J.—Mr. S. Leschiner, Newark, has purchased property at the corner of Hill and Broad Sts., where he is erecting a modern auditorium. He also contemplates erecting a modern 16-story fireproof hotel adjoining the auditorium.

WOODBURY, N. J.—Plans are being prepared by Chas. R. Peddle, 136 South 4th St, Philadelphia, Pa., for the construction of a high school. T. E. Parker is Secy. of the School Board. The estimated cost is $75,000.

HANNASTOWN, PA.—Bids will be received until Feb. 27, by E. B. Youngman, Secy. School Board of Braddock Township for constructing a school building in Hannastown. Carlisle & Sharrer, 607 Ferguson Bldg., Pittsburg are the Archs.

PHILADELPHIA, PA.—E. Allen Wilson, Land Title Bldg. is preparing plans for the construction of a 4-story apartment building at 61st and Luddow Sts. The estimated cost is $70,000.

CHEVY CHASE, MD.—The Church of the Blessed Sacrament will erect an edifice. Plans prepared by Milburn, Heister & Co., Archs., Washington, D. C.

CUMBERLAND, MD.—The City has opened bids for the construction of a City Hall. Henry Brown of Philadelphia, Pa., was the lowest bidder at $84,498.

BALTIMORE, MD.—Gen. Clinton L. Riggs, has had plans prepared by Glidden & Friz, Glenn Bldg., Baltimore, for erection of an apartment house at Charles and Read Sts., to be nine stories high of pressed brick and stone construction with marble trimmings; terra-cotta roof. The estimated cost is about $150,000.

WASHINGTON, D. C.—Bids were received as follows on Feb. 16, by the Commissioners of the District of Columbia, for a school building for the Alexander Crummel School in Ivy City, D. C. Burgess & Parsons, $53,768; Skinner & Garrett, $51,472; Hoge & Luebkert, $51,000; W. E. Mooney, $49,994; Allen T. Howison, $51,000; Thos. H. Melton, $51,200. All of Washington, D. C.

WASHINGTON, D. C.—Capital Traction Co. will erect a 2-story brick power station at 3140 K St. northwest; estimated cost $200,000. Plans prepared by the Capital Traction Co. MARSH & PETER, 520 13th St., Washington is contractor.

*FORT MONROE, VA.—Bids will be received in triplicate by R. B. McBride, Const, Q. M., U. S. A., until March 17, for the construction of Barrack for Enlisted Specialists at Fort Monroe, Va. Plans and specifications may be seen at the office of the Chief Quartermaster Department of the East, Governor's Island, New York.

HARRISBURG, VA.—The Trustees of the Methodist Episcopal Church South will receive bids until March 1, for the erection of an edifice. Charles M. Robinson, 1024 Mutual Bldg., Richmond is Arch.

PORTSMOUTH, VA.—The Government has awarded the contract to R. H. RICHARDSON & SON., Hampton, Va., at $42,973 for the erection of building No. 23 in the Norfolk Navy Yard. The contract includes electric runway.

RICHMOND, VA.—The Asbury Methodist Episcopal Church South will open bids Feb. 17, for erection of edifice, 65 × 126 ft; mill construction, direct and indirect steam heat, electric alcove lighting, prism glass, cost $40,000. Plans by Huggins & Bates, Roanoke, Va.

MORREFIELD, W. VA.—The Board of County Commissioners has employed Milburn, Heister & Co., Archs., Washington, D. C., to prepare plans and specifications for new court house. Plans will be ready for contractors in about six weeks.

LEXINGTON, N. C.—Bids were received as follows on Feb. 15, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office building at Lexington, N. C.: (1) limestone, (2) sandstone. Ambrose B. Stannard, New York, (1) $45,000; (2) $46,500; Thomas H. Melton, Washington, D. C., (1) $51,100, (2) $52,300; Johnson & Matthews Construction Co., Florence, S. C., (1) $56,000, (2) $56,700; Gregory Williamson, Norfolk, Va., (1) $56,000, (2) $58,700; Edward J. Frost, Asheville, N. C., (1) $51,700; James Seay & Co., Concord, N. C., (1) $46,400, (2) $47,200; Plowman Construction Co., Philadelphia, Pa., (1) $49,614, (2) $50,614; Holladay & Crouse, Greensboro, N. C., (1) $52,061, (2) $52,561; Newport Contracting & Engineering Co., Newport News, Va., (1) $56,887, (2) $59,887; George Leigh & Bro., Louisa, Va., (1) $49,970, (2) $49,970; D. J. Philipps, Newport News, Va., (1) $49,666, (2) $52,282.

RALEIGH, N. C.—The Directors of the State Hospital have asked for an appropriation of $73,000 to erect a building for female patients. A total appropriation of $183,750 is asked for this year and same amount for 1912.

WILMINGTON, N. C.—Milburn, Heister & Co., Archs., are preparing plans and specifications for new residence for Mr. Henry Walters, Chn. Board of Control, Atlantic Coast Line Ry. Co. Bids will be taken by and all communications can be addressed to Mr. Thomas H. Wright, Wilmington.

ALLIANCE, OHIO.—The Board of Education has employed Wilbur T. Mills, Arch., Columbus to prepare plans and specifications for a $50,000 school building here.

ALLIANCE, OHIO.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., March 30 for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Alliance, Ohio, in accordance with the drawings and specifications, copies of which may be obtained from the Custodian of site at Alliance, Ohio, or at the discretion of the Superv. Arch.

ASHTABULA, OHIO.—The following bids were received on Feb 14 for the construction of a school at Lake St. John Johnson & Son, Ashtabula, Ohio, $106,885; Sterling Engineering Co., Milwaukee, Wis., $103,670; Glick & Burgess, Lorain, $86,800; Lacy Construction Co., Pittsburg, Pa., $12,104; NIXON & LAMONT, Titusville, Pa., $85,591 (awarded contract); Norris & Allen, Buffalo, N. Y., $95,395; George Kratt, Lorain, Ohio, $98,880.

CLEVELAND, OHIO.—Bids will be received until March 6, by the Board of Education for the construction of the West Technical High School at West 93d St. and Willard Ave. Charles Orr is Dir. Schools..

COLUMBUS, OHIO.—Riebel & Sons, Archs. have prepared plans for a school building to be erected on Dana Ave. The estimated cost is about $100,000.

LAKEWOOD, OHIO.—Bids will be received until March 3, by the Board of Education for the construction of a school on Madison Ave. Charles W. Hopkinson, Rose Bldg., Cleveland is Arch.

LUCASVILLE, OHIO.—Bids will be received until March 8 by the Board of Education, Lucasville, for the construction of a high school. John R. Cockrell is Clk.

WEST JEFFERSON, OHIO.—The Board of Education will receive bids until Feb. 28, for the construction of a 2-story school here. L. E. Evans is Clk.

WABASH, IND.—Bids were received as follows on Feb. 18, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Wabash, Ind.: (item 1, limestone; item 2, sandstone). J. G. Unkefer & Co., Minerva, Ohio, (1) $59,450; R. S. Moore, Lafayette, Ind., (1) $64,963, (2) $71,213; T. M. Roode & Co., Tipton, Ind., (1) $68,367, (2) $72,500; George W. Stiles Construction Co., Chicago, (1) $64,598; Ed. Henry, Catlettsburg, Ky., (1) $70,700, (2) $74,300; George P. Herzog, Lafayette, Ind., (1) $73,617; J. E. & A. L. Pennock, Philadelphia, (1) $61,400, (2) $62,800; King Lumber Co., Charlottesville, Va., (1) $72,700, (2) $76,000; Christ Kanzler & Son, Evansville, Ind., (1) $67,264; P. H. McCormick Co., Peru, Ind., (1) $64,393, (2) $68,393; Barnes Bros., Logansport, Ind., (1) $64,890, (2) $70,000; Conners Bros. Co., Lowell, Mass., (1) $69,200.

ARCADIA, IND.—The School Board is preparing to ask for bids for the construction of a new and up-to-date school building.

MARKLE, IND.—The Town Council has decided to ask for bids for the construction of a new city hall to be constructed of concrete.

NOBLESVILLE, IND.—The City Council is planning to ask for bids for the erection of a Carnegie library in Noblesville.

ROCKVILLE, IND.—A modern opera house will be erected by Howard Maxwell and J. S. McFaddin on a site purchased for that purpose, at Ohio St.

STILESVILLE, IND.—It is reported that the School Board is preparing to build a new school building this spring.

TERRE HAUTE, IND.—The Wabash Realty Co. is preparing to build a large office building. Plans have not been decided on.

VINCENNES, IND.—John Hanna, Trustee of Harrison Township, Knox County, will soon ask for bids for the erection of a new school building in the Frieland District.

JEFFERSON, WIS.—Julius Heimerl, Arch., 220 34th St., Milwaukee, Wis., has been commissioned to prepare plans and take bids after approval by Board of Directors for the new banking house of the Farmers & Merchants Bank, 48 × 100 ft. two stories high, of brick and stone construction with limestone front in carved classic design. Approximate cost, $20,000. H. C. Christians, is Pres.; George J. Kispert, is Cash.

MARINETTE, WIS.—The Roman Catholic Church, Our Lady of Lourdes, is contemplating the erection of a parochial high school and institute to cost $75,000.

MILWAUKEE, WIS.—Otto Meistaer and F. J. Ries have leased the property at 212-214 Grand Ave., and will build a $40,000 theatre.

The Board of School Directors, Frank M. Harbach, Secy., has voted to erect additions to North and South Division high schools, increasing the accommodations of each from 700 to 1,000 students. Work will be commenced as soon as $320,000 municipal bonds for school construction are sold. Charles J. Poetsch is City Engr.

Betts & Hosmer, Archs., 120 Wisconsin St., have prepared plans for the construction of an addition to the Riverside Sanitarium, Edgewood and Prospect Ave., Dr. F. C. Studley, is Supt. The building will be of brick construction, L-shaped, 80 ft. long and 36 ft. wide all around, three stories high. Sixteen bathrooms and 40 rooms. Architects will receive bids.

SHEBOYGAN, WIS.—The J. & W. Jung Co., Department Store, has increased its capital from $150,000 to $250,000 to cover proposed extension of the business and an addition to its present building.

SHEBOYGAN, WIS.—The Board of Education has been authorized to expend $50,000 for the erection and equipment of the new Eighth Ward public school building.

VIOLA, WIS.—Viola Light & Power Co. has filed articles of incorporation and been granted a charter. Capital stock, $25,000. The incorporators are C. R. Thomson, A. A. Thomson and C. S. Thomson.

WAUPACA, WIS.—Bids will be received by L. F. Shoemaker, until 2 p. m., March 1, for the construction of a solid brick school building, with stone embellishments, to be used by Waupaca High School. Plans are by Parkinson & Dockendorff, Madison, Wis., Archs. Cost, $100,000.

WAUSAU, WIS.—The general contract for the construction of a telephone exchange and office building for Citizens' Telephone Co., has been awarded to JOHN ANDERES & SON, Wausau at $33,122. Van Ryn & DeGelleke, Milwaukee, are the Archs.

GRAND RIVER, IOWA.—Bids will be received until March 15, by the Building Committee for the construction of a 1-story brick edifice for the Methodist Congregation. Rev. Carl Krall is pastor.

MUSCATINE, IOWA.—A special election will be held here to vote on a proposed $58,000 bond issue for an addition to the high school building.

SHENANDOAH, IOWA.—Bids will be received until Feb. 28 by R. G. Berry, Chn. Bldg. Com. for the construction of a stone edifice for the Congregational Church. O. A. Houghland, Chariton, is Arch.

EL PASO, TEX.—The Pearson Co., El Paso, Tex., will soon receive bids for the construction of a 1-story steel and glass foundry to be erected in the southeast part of the city. The building will have cement and timbered floors and composition roof. The same company is taking bids for the construction of a steel roundhouse and railroad shop.

SAN ANTONIO, TEX.—Plans have been prepared by Atlee B. Ayres, 228 West Commerce St., for the construction of a Methodist Church in Laurel Heights at an estimated cost of $75,000. Rev. J. D. Young is Pastor.

WAXAHACHIE, TEX.—Bids were received as follows on Feb. 17 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Waxahachie, Tex.: Item (1) limestone, item (2) sandstone. John Bardon, Fort Worth, Tex., (1) $61,436; M. B. Whitlock & Co., Denton, Tex., (1) $67,854; Fred. Tarry & Son, Leavenworth, Kans. (1) or (2) $54,750; L. R. Wright, Dallas, Tex., (1) $69,427, (2) $71,427; W. W. Walston, Waxahachie, Tex., (1) $66,980, (2) $69,290; D. J. Phipps, Newport News, Va., (1) $64,700, (2) $67,750; Newport Contracting & Engineering Co., Newport News, Va., (1) $69,680, (2) $62,680.

MEDFORD, OKLA.—Bids will be received until Feb. 28, by Charles N. Ernest, Clk., School Dist. for the construction of a school building here.

NORTH YAKIMA, WASH.—Bids were received as follows on Feb. 18, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at North Yakima, Wash. Item 1, limestone; item 2, sandstone. Sound Construction & Engineering Co., Seattle, Wash., (1) $205,334, (2) $194,013; King Lumber Co., Charlottesville, Va., (1) $198,000, (2) $205,000; Campbell Building Co., Salt Lake City, Utah, (2) $197,400; Interstate Construction Co., Saginaw, Mich., (1), (2) $204,000; Wm. M. Maxwell, Great Falls, Mont., (1) $178,774; Conners Bros. Co., Lowell, Mass., (1) $205,500.

PORTLAND, ORE.—Bids will be received by the Board of County Commissioners until Feb. 25, for the construction of a west wing to the Court House. W. L. Lightner is Chn.

BAKERSFIELD, CAL.—Thos. B. Wiseman, Arch., and Chas. H. Biggar, have drawn plans for the construction of a 6-story fireproof hotel, for Henry J. Sollers. The structure will be, 53x100 ft. The estimated cost is $65,000. E. Bemus, Arch., also of Bakersfield has completed plans for a 2-story reinforced concrete store and office building to be erected at Taft, for Smith Bros. Co., 50 × 120 ft.

CLAREMONT, CAL.—The Board of Trustees of the Claremont High School District opened the following bids for the erection of the new polytechnic high school buildings, Robert H. Orr, Arch., Pomona, Cal. Three buildings will be erected of reinforced concrete and frame construction. The lowest bids received were as follows, bids being taken (a) for all three buildings; (b) for the main building; (c) for the manual art building; (d) for the domestic science building; for all work complete except heating and ventilating: Crookshank & Somers, Security Bldg., Los Angeles, (a) $83,343; (b) $60,380; (c) $10,994; (d) $11,968. William C. Crowell, Pasadena, (a) $94,854; (b) $76,000; (c) $8,950; (d) $9,900. For foundations, reinforced concrete and masonry work: Louis Ferrell, Pomona, (a) $43,456; (b) $36,618; (c) $3,662; (d) $3,776. For carpenter and mill work: F. O. Willis, Ontario, (a) $32,923; Hayward & Shiner, Pomona, (a) $42,157, (b) $19,466, (c) $6,104, (d) $6,586. For heating and ventilating: Machinery & Electrical Co., 351 North Main St., Los Angeles, (a) $4,293, (b) $3,793; Munger & Munger, Pasadena, (a) $5,828, (b) $5,325, (c) $245, (d) $249; Warner-Frass-Jones Co., Pasadena, (a) $3,652, (b) $3,196, (c) $250, (d) $250; Empire & Freyermuth, Pomona, (a) $3,040, (b) $3,271, (c) $323, (d) $449. Electrical work: Overhaltzer Electrical Co., Pomona, (a) $1,998, (b) $1,718, (c) $150, (d) $130. Plumbing: A. B. Avis, Pomona, (a) $3,090, (b) $1,413, (c) $819; (d) $978. Plastering: J. M. Martin, (a) $6,940, (b) $4,919, (c) $976, (d) $1,044. Excavating: Rufus Wiley, (a) $1,987, (b) $1,558, (c) $185, (d) $227. Blackboards: Empire & Freyermuth, (a) $311.90, (b) $276.96, (c) $27.84, (d) $7.20.

LOS ANGELES, CAL.—Parkinson & Bergstrom, Archs., Security Bldg., have awarded the following contracts: For all marble work to B. V. COLLINS, 928 South Main St., at $17,000; for all iron work to the PACIFIC ORNAMENTAL IRON WORKS, 1442 South Main St., and to E. D. HOUGH, 308 Boyd St. for heating and ventilating, $25,000.

OAKLAND, CAL.—Sullivan W. Jones, a member of the Architectural firm of Palmer & Hornbostle, New York, will supervise the erection of the proposed $1,000,000 city hall. Mr. Jones brings with him the plans and specifications for the structural steel work, and the Board of Public Works will at once advertise for bids.

PORTERVILLE, CAL.—Benjamin G. McDougall, Arch., Sheldon Bldg., San Francisco, has been commissioned to prepare plans for a 2-story reinforced concrete commercial hotel building, to be erected here. The building will be of mission style, tile roof, cement plastered exterior. Estimated cost, $45,000.

SAN FRANCISCO, CAL.—The State of California has completed the purchase of a site at 14th and Mission Sts., upon which to erect an Armory building to cost $420,000. The state has already made the appropriation for the building and work will begin as soon as the plans are completed by the state Architect and contracts for the work awarded.

WOODLAND, CAL.—Fred. Meier will construct a large alfalfa mill here, to have a capacity of three to five tons per hour. The mill will be equipped with modern machinery.

HALIFAX, N. S.—Plans for the Mining and Metallurgical Laboratory in connection with the Nova Scotia Technical College have been completed and bids for construction will be received soon. Address Prof. E. A. Holbrook.

MONTREAL, QUE.—Henry Birks & Sons have purchased a site at the corner of Union Ave. and St. Catherine's St., on which they will erect an 8-story, 90 × 130-ft. store, office and factory building.

The Gillette Safety Razor Co. of Canada have purchased a site on St. Alexander St., on which they will erect a $100,000 building this spring.

MONTREAL, QUE.—The Canadian Pacific Ry. has taken out a permit for the erection of new freight sheds, extending from Lacroix St., near Place Viger station, to Montcalm St. The estimated cost is from $66,000 to $100,000, J. G. Sullivan is Asst. Ch. Engr.

LISTOWEL, ONT.—Bids will be received until Feb. 27 by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, for the construction of a public building at Listowel. H. J. Lamb is Dist. Engr., London.

MITCHELL, ONT.—Bids will be received until March 1, by R. C. Desrochers, Secy., Dept. Pub. Wks., Ottawa, for constructing a public building at Mitchell. H. J. Lambe, London, is Dist. Engr.

NIAGARA FALLS, ONT.—The General Hospital Association has secured funds for the erection of the King Edward Memorial Home for Nurses and will at once have plans prepared.

TILSONBERG, ONT.—Bids will be received by R. C. Desrochers, Deputy Min. Pub. Works, Ottawa, Ont., until noon, Feb. 28, for the erection of a public building here.

TORONTO, ONT.—The Canadian Pacific Ry. Co. has plans for the expenditure of $4,000,000 here this year. A large office building for express purposes, a reinforced concrete viaduct, a passenger depot costing $1,000,000 and new freight yards are among the proposed improvements.

BRANDON, MAN.—The Provincial Government has purchased the site for the new Normal School, which will occupy two blocks between Tenth and Twelfth Sts. and Queens and Hills Aves. Buildings and equipment will cost $50,000. Hon. G. R. Caldwell is Minister of Education, Winnipeg.

WINNIPEG, MAN.—Bids will be received until noon, Feb. 28 by Hon. Robert Rogers, Min. of Pub. Wks., for an administration building in connection with the Agricultural College. Estimated cost $150,000.

According to press reports, James J. Hill is having plans prepared in St. Paul for terminal facilities here for the Great Northern R. R. at an estimated cost of $2,000,000.

SASKATOON, SASK.—THE CARTER-HALLIS-ADLINGER CO., has been awarded the contract for the new hotel here at $300,000. Brown & Vallance, Montreal, are Archs.

SMITH BROS. & WILSON, Regina, Sask. have been awarded the contract for the erection of Emmanuel College at $51,000. The bids for other buildings in connection with the new university will be received shortly.

A. Bowerman is having plans prepared for a business block to be constructed here at a cost of about $140,000.

NEW WESTMINSTER, B. C.—The city has voted $170,000 for the erection of five new schools, ranging in price from $3,000 to $75,000.

VANCOUVER, B. C.—The Directors of the Vancouver Exhibition Association have decided to erect a number of new buildings this year.

CALGARY, ALTA.—The Hudson's Bay Co. have purchased a new site on Eighth Ave., upon which will be constructed a large department store.

CALGARY, ALTA.—The Calgary Natural Gas Co. will pipe natural gas from Gleichen, Alta., a distance of 55 miles. The pipe line will cost approximately $3,500,000 and work will be started this Spring.

The plans of Davis & Brooks of this city have been accepted for the new City Hall building. Ten sets of plans were submitted to the City Hall commission, and the choice of the Davis & Brooks' plans was unanimous. Definite building arrangements are contingent upon the action of the city electors at the spring election in April.

WATER SUPPLY—IRRIGATION.

*(*Denotes that this work is advertised in Engineering News.)*

WINTHROP, ME.—Surveys have been completed and plans are being prepared by Dudley & Sawyer, of Manchester, N. H., for the construction of water-works. Frank L. Bishop is Chn. Water Comrs.

MARBLEHEAD, MASS.—The Water Commissioners have awarded the contract to the LAIDLAW-DUNN-GORDON CO., Boston, Mass., for installing a new pump at the municipal water plant. Estimated cost, $15,000.

WORCESTER, MASS.—Frederick A. McClure, City Engr., is preparing plans for damming Kendall Reservoir, so that the water will run from the opposite end and flow into the present Holden system, through conduits already constructed. The building of the dam will cost about $150,000, according to the engineer's estimate, and the work necessary to flooding the 170 acres in the Kendall basin, and clearing the shores, 88 acres more, will cost about $100,000.

WALLINGFORD, CONN.—The borough is considering the extension of water mains to Yalesville and Tracy, six miles of 10, 8, 6 and 4-in. pipe, and the construction of two dams at Pistapang Pond. Estimated cost, $40,000. William A. Mackenzie is Supt. and Engr., Water Dept.

NEW YORK, N. Y.—Bids will be received until 2 p. m., March 1, by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, for hauling and laying water mains and appurtenances in various streets, east of Park Ave., Boro. The Bronx; and for furnishing, delivering and laying water mains in Mosholu Parkway, at intersection with Jerome Ave.; in Jerome Ave., between Mosholu Parkway South and 500 ft. south of same, and in city property north of and adjacent to the Jerome Ave. pumping station and removing existing water-mains within the above described territory.

SCHENECTADY, N. Y.—We are officially advised that the city is considering the construction of an underground reservoir; also repairing various streets. Estimated cost, $300,000. J. Leland FitzGerald is City Engr.

WATERFORD, N. Y.—The City Health Officer has recommended the construction of a filtration plant.

WESTBURY (L. I.), N. Y.—Walter E. Sexton, Consult. Engr., of Mineola (L. I.), N. Y., has prepared plans for the construction of new water-works here. Estimated cost, $70,000.

PLAINFIELD, N. J.—The majority report of the Councilmanic Water Commission, it is reported, favors the condemnation of the plant of the Plainfield Union Water Co., instead of installing an independent municipal plant. Andrew J. Gavitt is City Engr.

*BRISTOL, PA.—Bids will be received until noon, March 20, by the Boro. Council for constructing a complete water-works and filtration plant. Jay M. Whitham is Engr., 607 Bullitt Bldg., Philadelphia, Pa.

LANCASTER, PA.—Bonds for $75,000 were sold on Feb. 1 for constructing a dam and bridge at the pumping station; for constructing an auxiliary pumping plant at the reservoir and laying water mains in various sections of the city.

BENWOOD, W. VA.—A charter has been issued to the Benwood & McMechen Consolidated Water Co., of Benwood, W. Va., with a capital stock of $200,000, for the purpose of supplying Benwood, McMechen and other towns with water. Among the incorporators are: E. Gates and G. Gelwocks, of Steelton, Pa.

*AUGUSTA, GA.—Bids will be received by the City Council until 4 p. m., March 2, for furnishing f. o. b. cars, Augusta, 1,000 lin. ft. 12-in., 350 lin. ft. 10-in., 2,400 lin. ft. 8-in. and 8,000 lin. ft. 6-in. pipe. All Class C c.-i. pipe, standard specifications, together with the necessary specials to lay above pipe Nisbet Wingfield is City Engr. and Comr. Pub. Wks.

TAMPA, FLA.—The citizens of the Palmetto Beach section of the city have petitioned the City Council for the extension of the water mains to Palmetto Beach. George P. Sullivan is City Engr.

DOTHAN, ALA.—The city has decided to spend $60,000 for the construction of water-works and an electric light plant. The work will include a 60 × 200-ft. brick building, and 10 × 125-ft. brick stack, a reinforced concrete reservoir, a 2,000,000-gallon pump, etc. B. R. Pilcher is Engr.-in-Charge.

VICKSBURG, MISS.—The City Council, it is reported, is in favor of the purchase of the Vicksburg Water Works plant. T. R. Twiss is City Engr.

OWENSBORO, KY.—Bids will be received until March 10 for concrete work, housing and excavation for a municipal water softening plant. S. Lambert is Mayor.

AKRON, OHIO.—Surveys have been started for the construction of reservoirs for a city water supply, subject to a vote of a bond issue necessary to carry out the project should the plans be adopted. E. G. Bradburg, Columbus, Ohio, is Consult. Engr.

TOLEDO, OHIO.—Bids were received at the office of the Director of Public Service on Feb. 14 for the construction of the extension of water purification works, being Contract No. 17 of the Improvement of Water Supply. The work to be done includes the construction of foundations, channels, filters, piping, building, including lighting and heating, the same forming an extension of the existing plant for purifying Maumee River water. The extension will consist of 14 filters and appurtenances and must be capable of purifying and delivering 14,000,000 gallons of water per day: American Water Softener Co., Philadelphia, Pa., $68,000; Norwood Engineering Co., Florence, Mass., $77,985; Roberts Filter Mfg. Co., Philadelphia, $88,119; Pittsburg Filter Mfg. Co., Pittsburg, $85,187; Continental Jewel Filtration Co., New York, $78,800; Fred T. Ley, Inc., Springfield, Mass., $83,700, or with other equipment, $76,200. W. G. Clarke, New York, is Engr.

WOOSTER, OHIO.—Three bids have been received as follows for the construction of an addition to the water-works system here: The Harris Air Pump Co., of Indianapolis, Ind., $8,400; the Canton-Hughes Pump Co., three bids, $6,165, $6,415 and $7,000; the Strong-Carlisle-Hammond Co., of Cleveland, Ohio, $6,530. The following will be required: One duplex cross-compound air compressor of the Myer Valve Gear construction or other approved type of valve gear, compressor to be of 500-ft. capacity at a speed not to exceed 150 r.p.m., steam pressure 100 lbs.; air pressure, 90 to 100 lbs. One air receiver of approved size. One 100-HP. Scotch Marine type boiler, complete with 50 ft. of stack. Air compressor and boiler to be erected on foundation provided by contractor. Proposition to include piping for four 8-in. wells, with well heads and foot pieces and all valves as shown on blue prints, which can be had on application. Also all pipe work to connect with compressor in the pump station. The well foot pieces to be of the Indiana Air Pump Co.'s design, or their equal, and of a size that will handle 200 gallons or more per min.

SOUTH BEND, IND.—The Water Works Trustees are considering the reconstruction of the water system. Before a final decision is reached a thorough investigation will be made by experts. William S. Moore is City Engr.

MOUNT CLEMENS, MICH.—Bids will be received until March 3 by the Board of Public Works for a 3,000,000-gallon pumping engine for the water-works system.

LEWISTOWN, ILL.—The city is considering the extension of the water mains, digging a large well, and installing a pump. Estimated cost, $7,000. J. H. Allison is City Clk.

FOND DU LAC, WIS.—The proposition to purchase the plant of the Fond du Lac Water Co. for $30,000 will be voted on at the April elections. If the vote is favorable, the administration plans to extend the plant, which now is inadequate for the needs of the city.

LA CROSSE, WIS.—The Water and Light Commission has awarded contracts as follows: To WORTHINGTON METER CO., New York, 300 ⅝-in. meters; HERSEY METER CO., Boston, 50 ¾-in. and 25 1-in. meters; BADGER METER CO., Milwaukee, Wis., ten ⅝-in. meters, 80 coils lead pipe; to RAYMOND LEAD PIPE CO., Chicago, at $5.20 per 100 lbs.; meter boxes, to BLIED & SCHNEIDER, Madison; brass fittings, etc., to MILLER CO., Decatur, Ill.

CORYDON, IOWA.—Bids will be received until 3 p. m., Feb. 28, for the construction of a pump house and reservoir, hydrants, valves, etc., triplex pump and deep well pump, 15 and 30-HP. motors and electrical apparatus. The Iowa Engineering Co., is Engr.-in-Charge, Clinton, Iowa.

EVELETH, MINN.—The cost of laying a new water main from the railroad tracks to St. Mary's Lake has been estimated at $14,000. Peter F. Huntington is City Engr.

The city is considering improvements at the pump-house and laying a 16-in. main from the pump-house to the new 300,000-gallon tank.

FARIBAULT, MINN.—The contract has been awarded to the S. SWANSON ARTESIAN WELL CO., of Minneapolis, Minn., for drilling a new well and cleaning an old well, at $7.25 per ft., including the casing.

MINNEAPOLIS, MINN.—We are officially advised that bids were received as follows on Feb. 10 by the City Council for water-works materials: For 3,175 tons of c.-i. pipe, 6, 8, 12 and 16-in. sizes, f. o. b. Minneapolis: James B. Clow & Sons, Chicago, Ill., $26 per ton; U. S. Cast Iron Pipe & Foundry Co., Chicago, $24.65.; Florence Iron Works, Camden, N. J., $24.50.

For 175 hydrants, 3-in., with frost jackets, f. o. b. Minneapolis: Darling Pump & Mfg. Co., Williamsport, Pa., $41 each; Columbia Iron Works, $36.80; Ludlow Valve Mfg Co., Troy, N. Y., $39 (no frost jackets); South Park Foundry Co., St. Paul, Minn., $41.50; R. D. Wood & Co., Philadelphia, Pa., $40.75.

For 160 6-in., eight 8-in., 18 12-in., and seven 16-in.: Coffin Valve Co., Boston, Mass., $16, $22, $41 and $73; Rensselaer Valve Co., Troy, N. Y., $11, $17, $31.50 and $66.75; Darling Pump & Mfg. Co., Williamsport, Pa., $12.60, $18.90, $34.50 and $69; James B. Clow & Sons, Chicago, Ill., $11, $17, $31 and $65: Chapman Valve Co., Springfield, Mass., $11, $16, $31 and $65; Ludlow Valve Co., Troy, N. Y., $11.85, $17.75, $32.15, $72.90; Roe-Stephens Co., Detroit, Mich., $12, $16.50, $32.50, $65.50; Western Valve Co., Chicago, Ill., $8.28, $13.50, $30.60 and $61.20; South Park Foundry Co., St. Paul, Minn., $13.50, $18.50, $38.50 and $80; Kennedy Valve Co., Elmira, N. Y., $10.40, $16.95, $36 and $83 (f. o. b. Elmira, N. Y.).

For two 30-in. Venturi water-tube meters f. o. b. Minneapolis: Builders' Iron Foundry, Providence, R. I., $2,200 and $1,995; Simplex Valve & Meter Co., Philadelphia, Pa., $1,944; Henry R. Worthington, Harrison, N. J., $2,750.

For 190 tons of special castings: Union Iron Works, Minneapolis, Minn., $47.80 per ton; A. D. Hays Co., Chicago, Ill., $57.50; Northwestern Foundry, Minneapolis, Minn., $55.50; Crown Iron Works, Minneapolis, $54; James B. Clow & Sons, Chicago, Ill., $57.50.

MINNEAPOLIS, MINN.—Bids were received on Feb. 10 as follows by the City Council for supplies for the filtration plant: For 136 tons of c.-i. pipe and special castings, 4 to 24-in.; 300 tons of 30-in. and over; 51 tons of 4 to 24-in., B. & S.; 87 tons of 30-in., same; 74 tons of 4 to 24-in., flanged; 11 tons of 30-in., flanged: U. S. Cast Iron Pipe & Foundry Co., Chicago, Ill., $25, $25, $70, $70, $80 and $80; Glamorgan Pipe & Foundry Co., Lynchburg, Va., $55 for 4 to 24-in. B. & S., $75 for 4 to 24-in. flanged; Crown Iron Works, Minneapolis, $70 for 4 to 24-in. B. & S., $70 for 30-in. same, $75 for 4 to 24-in. flanged and $75 for 30-in. flanged: Camden Iron Works, Camden, N. J., $26.75 for 4 to 24-in., $26.75 for 30-in. and over, $83.50 for 4 to 24-in. B. & S., and $98.50 for 4 to 24-in. flanged; Union Iron Works, Minneapolis, $69.80 for 4 to 24-in. B. & S., $69.80 for 30-in. same, $69.80 for 4 to 24-in. flanged, and $69.80 for 30-in. flanged.

For 101 valves from 60-in. to 4-in.: Coffin Valve Co., Boston, Mass., $1,340 to $850 each (f. o. b. Boston); Chapman Valve Co., Springfield, Mass., $1,750 to $750; Western Valve Co., Chicago, Ill., $1,890 to $675; James B. Clow & Sons, Chicago, $800 to $740; Rensselaer Valve Co., Thoy, N. Y., $1,180 to $765; Roe-Stephens Co., Detroit, Mich., $1,100 to $725.

For 31 sluice gates from 48 x 60-in. to 12-in. circle: Chapman Valve Co., Springfield, $527.50 to $55 each; Coffin Valve Co., Boston, $452 to $58 (f. o. b. Boston); Roe-Stephens Co., Detroit, $525 to $47.50.

ST. PAUL, MINN.—The Water Board on Feb. 6 received bids for the equipment of the six artesian wells at McCarron Lake as follows: Baily & Marsh Co., Minneapolis, two bids, $28,796 and $25,796; Hankee & Eha, St. Paul, $22,958; R. B. Whittaker, St. Paul, three bids, $29,600, $30,700 and $32,200; Robinson, Cary & Sands Co., St. Paul, two bids, $26,812 and $27,165; J. G. Robinson & Co., St. Paul, $37,000. The bids embrace the direct lift, the air lift and the centrifugal pump operated by electric current.

TRACY, MINN.—Lester J. Fitch, City Recorder, will receive bids until 8 p. m., March 2, for the construction of water mains.

EMPORIA, KAN.—The city has decided to construct the proposed water-works with its own forces. Estimated cost, $13,000. Mathew Brown is Engr., Emporia.

NEWTON, KAN.—The City Commisioners will lay about 4,000 ft. of water mains in the northeastern section of the city.

SMITH CENTER, KAN.—The city is considering the construction of a water system.

HURON, S. DAK.—Bids were received on Feb. 6 for water-works improvements here from plans by L. P. Wolff, of St. Paul, Minn. Contracts have been awarded as follows: Pump house, to the FRANK JAEHN CONSTRUCTION CO., of Huron, $4,859; pumping plant, to E. J. MERKLE, of Kansas City, Mo., $12,550; reservoir, to W. D. LOVELL, of Minneapolis, Minn., $9,900, and water tower, to DES MOINES BRIDGE & IRON CO., of Des Moines, Iowa, $11,088. L. G. Couter is City Engr.

PIERPONT, S. DAK.—Bids will be received until March 13 by the city for 1,820 ft. of 6-in., and 6,460 ft. of 4-in. c.-i. pipe, 17 hydrants and valves and fittings. Tanner Bros., Webster, S. Dak., are Engrs.

*TOWNSEND, MONT.—We are officially advised that bids were received by E. H. Goodman, Town Clk., on Feb. 14 for the construction of a water-supp[illegible] system, pumping system type, with ele[illegible]d tank. The contract has been awarded [illegible] W. D. LOVELL, Minneapolis, Minn., a[illegible] 24,778. There were nine other bids submi[illegible] ranging from $25,906 to $34,981. C. M. T[illegible]pson is Engr., Bozeman, Mont.

KANSAS CITY, MO.—The [illegible]e and Water Board has decided to la[illegible] 12-in. main from Broadway and 62d S[illegible] 75th St., to supply water to the Waldo [illegible]rict.

ST. JOSEPH, MO.—The ci[illegible] considering laying water mains to the n[illegible]ast suburbs.

ASHDOWN, ARK.—The [illegible] will construct a water-works and li[illegible] plant and a sewer system.

AUSTIN, TEX.—The City [illegible]mission has ordered 3,000 ft. of new wa[illegible]ains, which will be used for making ex[illegible]ions to the water-works system. George [illegible]dell is City Engr.

*DALLAS, TEX.—Bids will b[illegible]ceived until 3 p. m., March 1, by J. B. [illegible]nslett, City Secy., for furnishing f. o. b. [illegible], Dallas, water meters in sizes from [illegible] to 1-in. inclusive, in lots of 5,000, 7[illegible]nd 10,000. Specifications are on file at th[illegible]fice of the City Secretary and may be h[illegible] application.

*GALVESTON, TEX.—Bids w[illegible] be received by the Board of City Comm[illegible]ners until noon, April 3, for the comple[illegible]stallation of a water main, ready for u[illegible] along the Causeway from Virginia Point [illegible] Galveston Island, requiring approximatel[illegible]9,766 lin. ft. of 30-in. c.-i. pipe.

GREENVILLE, TEX.—The ci[illegible] considering sinking wells to increase [illegible] present water supply here.

HAMILTON, TEX.—The contr[illegible] for furnishing about 9,000 ft. of c.-i. [illegible] valves, etc., has been awarded by the [illegible] to the AMERICAN CAST IRON PIPE [illegible] of Birmingham, Ala. Bids were opened [illegible] Feb. 6.

HOUSTON, TEX.—The Melado [illegible]and Co. has engaged the Randall-Lovegr[illegible] Wyman Co., Consult. Engrs., of Houston, [illegible] prepare plans for and construct an irrigat[illegible] system to develop 24,000 acres.

MARLIN, TEX.—The City Coun[illegible], on Feb. 2 granted a water-works franchis[illegible] to J. E. Brown and W. D. Kyser.

EL RENO, OKLA.—We are off[illegible]ally advised that the city will spend $[illegible],000 for the betterment of the water pla[illegible] M. P. Latimer is City Engr.

MOUNTAIN VIEW, OKLA.—R. [illegible] Jones of Mountain View, on Feb. 8, filed an application with J. M. Sandin, Secy. Bd. of Agriculture, for a permit to irrigate several hundreds of acres of land along the Washita River valley. It is proposed to construct a reservoir at the foot of Rainy Mountain. Estimated cost, $10,000.

FARMINGTON, N. MEX.—The city is considering the construction of a municipal water system.

TUCUMCARI, N. MEX.—The New Mexico Realty Co. will install irrigation pumping plants upon tracts of land near here. Shallow wells will be sunk and each pumping plant will operate four wells, the water supply therefrom being sufficient to irrigate about 40 acres, it is stated. J. W. Campbell, of Tucumcari, is Mgr.

ELKO, NEV.—The County Commissioners of Elko County have granted permission to Allan Allen, of Denver, Col., and associates, to construct a large irrigation project in Northern Elko County, to be known as the Fort Halleck Irrigation District. A large reservoir and many canals will be constructed.

WELLS, NEV.—Bids will be received until noon, April 15, by the Pacific Reclamation Co., at the office of George M. Bacon, 159 Pierpont Ave., Salt Lake City, Consult. Engr., for the company, for the construction of a storage dam about 15 miles north of here.

PHOENIX, ARIZ.—Bids will be received until 2 p. m., March 10, by the U. S. Reclamation Service, Los Angeles, Cal., for furnishing turbine water-wheels for the Salt River project, Arizona. W. A. Farish is Engr., Roosevelt, Ariz.

CHENEY, WASH.—The city will spend about $7,000 for water-works improvement. F. L. Ratcliffe is City Clk.

ELMA, WASH.—The city is considering the enlargement of the water-works system.

SEATTLE, WASH.—Bids will be received by C. B. Bagley, Secy. the Bd. of Pub. Wks., until 10 a. m., March 7, for the construction of a steel water tower on Magnolia Bluff, according to the plans filed in the office of the Board of Public Works.

BANDON, ORE.—Stannard & Richardson, Consult. Engrs., Henry Bldg., Portland, Ore., have been engaged as engineers in charge of the construction of the municipal water-works here. Bonds for $60,000 have been voted for this work.

REDMOND, ORE.—The city proposes to construct water-works. Contract will be awarded about May 15. The total cost will amount to $40,000, the first expenditure to total $10,000. William G. Phoenix is City Recdr.

BRAWLEY, CAL.—A claim of 2,000 miners ins. of water has been filed by Marion C. Chaffey and F. M. Salisbury at the northeast corner of Section 1, Township 15, South Range East. It is planned to construct a submerged dam across Carisso Creek and irrigate a portion of Carrisso Valley.

CORONA, CAL.—The contract has been awarded to the NEWTON CONSTRUCTION CO. for excavating eight miles of ditch for the Temescal Water Co.

MONROVIA, CAL.—Bids were received as follows on Feb. 6 by the city for constructing the municipal water system: For furnishing all material and laying pipe; Braun, Williams & Russell, $24,967; George S. [illegible]enson, $25,689; H. C. Register & W. N. Hendricks, $25,008; A. Barman, $31,466. For furnishing material; Crane Co., $18,160; U. S. Cast Iron Pipe & Foundry Co., $18,[illegible]62,

For laying pipe; B. R. Davisson Contracting Co., $3,773; A. Barman, $5,016; E. C. Willetts, $5,818; George S. Benson, $8,142; John Balch, $8,7[illegible], all bidders of Los Angeles, Cal.

GLENDORA, CAL.—Allin Bros., Consult Engrs., Pasadena, Cal., are preparing plans for the construction of a 3,000,000-gallon reservoir in the San Dumas Wash for the Glendora Water Co. Bids will be asked in about three weeks. Estimated cost, $9,000.

LANKERSHIM, CAL.—Edward Varney has been granted a franchise by the County Board of Supervisors of Los Angeles County for installing a water distributing system in the town of Lankershim.

LORDSBURY, CAL.—All bids for the construction of the municipal water system here have been rejected by the city. The City Trustees have directed Frank Lathrop, Field Engr. of Olmstead & Gillelan, Consult. Engrs., Wright and Callender Bldg., Los Angeles, to proceed with construction by day labor. Noted on Feb. 2.

PASADENA, CAL.—The Pasadena Land & Water Co. has awarded the contract to W. A. MONTAVILLE, Lester Ave. and Arroyo Drive, Pasadena, for relining a concrete reservoir on North Orange Grove Ave. Bids will be asked in the future for covering the reservoir. Allin Bros., Los Angeles, Cal., are Engrs.

SUSANVILLE, CAL.—The city is considering the construction or purchase of a water plant.

VALLEJO, CAL.—We are officially advised that the city is considering the construction of a concrete distributing reservoir and pipe line. Estimated cost, $90,000. A. P. Noyes is City Engr.

ST. BONIFACE, MAN.—The City Engineer will prepare for the city plans and estimates of cost for the construction of a 1,000,000-gallon reservoir.

CALGARY, ALTA.—By an additional grant the city will spend approximately $500,000 this year for extensions to the municipal water-works system; about 17 miles of mains will be laid.

LETHBRIDGE, ALTA.—The city is considering the construction of a gravity system of water-works. Estimated cost, about $800,000. C. M. Arnold is City Engr.

NORTH PORTAL, SASK.—The Canadian Pacific Ry. Co. has decided to install a water-works system here for its own use and also to supply the town. Estimated cost, $50,000. F. E. Schwitzer is Asst. Ch. Engr., Winnipeg, Man.

SEWERS.

*(*Denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—Bids will be received until Feb. 27 for the cleaning out of catch basins over the entire city. Louis K. Rourke is Comr. Pub. Wks.

BUFFALO, N. Y.—The City Council has ordered the construction of a 10-in. tile sewer in Julius St., south of Downing St., and directed the Board of Public Works to advertise for bids; also directed the Board of Public Works to contract with GEORGE W. MOORE, the lowest bidder for the construction of a 15, 12 and 10-in. sewer in Hollywood Place, east of South Side Parkway.

BUFFALO, N. Y.—We are officially advised that bids will be received until March 1 for the construction of a 36, 33, 30, 27 and 24-in. brick; 20, 18, 15 and 12-in. tile sewer in Connelly St., Olympic, Warwick and Northumberland Aves., between Bailey and Kensington Aves.; also a 5½ × 9-ft. brick and stone sewer in Lang Ave. and Texas St., between Bailey and Delavan Aves.; and a 27 and 24-in. brick and 20-in. tile sewer in west side of Elmwood Ave., between Amherst St. and 810 ft. south; and a 15 and 10-in. tile sewer in Wende St., between Ferry and Genesee Sts.; also a 10-in. tile sewer in Prairie Ave., between Tonawanda St. and southwesterly end of same. George N. Norton is Deputy Engr. Pub. Wks.

NEW YORK, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. Brooklyn, until 11 a. m., March 1, for furnishing all the labor and material required for the construction of sewer in Union St., between East New York Ave. and East 98th St., and tributary sewers in Sutter Ave., between Ralph Ave. and Union St., and in Blake Ave., between East 98th St. and Union St. For constructing sewer in 52d St., between New Utrecht and 13th Ave. For labor and material required for sewer in East 39th St., between the Long Island R. R. (between Ave. H and I) and Hubbard Pl., and an outlet sewer in Hubbard Pl., between East 39th St. and East 40th St. For furnishing all the labor and material required for constructing a sewer in East 23d St., from Canarsie Lane to Beverly Rd. For labor and material required for sewer in Bushwick Ave., westerly side, between Hart and Lawton St. For all the labor and material required for sewer in 55th St., between 12th and 13th Aves., and an outlet sewer in 12th Ave., between 55th St. and 56th Sts. Plans and specifications may be seen at the office of the Bureau of Survey, 215 Montague St., Brooklyn.

YONKERS, N. Y.—See item under Streets and Roads.

*BRISTOL, PA.—Bids will be received by the Borough Council of Bristol until noon, March 20, for labor and material necessary to construct a complete system of sewerage and disposal plant, including approximately ten miles of sewers, 8 to 24 ins. in diameter. Plans and specifications may be obtained at the office of the Borough Surveyor, 29 Radcliffe St., Bristol. William H. Boardman, 426 Walnut St., Philadelphia, Pa., is Engr.

BROOKLYN, MD.—The Anne Arundel County Commissioners, Annapolis, Md., have awarded the contract for the installation of sewers in streets of Brooklyn to BOND & YATES, Baltimore.

FORT WASHINGTON, MD.—Bids will be received in triplicate until 1.30 p. m., March 20, by Capt. R. H. Kelton, Constr. Q. M., U. S. A., for the construction of an 8-in. sewer outlet and iron outfall at Fort Washington, Md.

ROLAND, MD.—A gravity sewer system will be constructed by the Baltimore Suburban Sewerage Co., Albert H. Wehr, Pres. The system will extend through Chestnut Hill, Hilltop Park, Mt. Washington Heights, Cheswold and Bancroft Park.

*MOUNDSVILLE, W. VA.—Bids will be received until 10 a. m., March 21, by Oscar B. Bonar for labor and material necessary to construct about 26 miles of sewers, varying in size from 6-in. to 36-in. in diameter. Plans and specifications may be obtained from Oscar B. Bonar. J. M., Williamson is Mayor.

EDENTON, N. C.—The town is contemplating issuing bonds for $20,000 for the construction of a sewer system.

MARKS, MISS.—The City Council has authorized a bond issue of $5,000 for the construction of a sewerage and water-works system here.

GENEVA, OHIO.—See item under Streets and Roads.

GRAND VIEW (Columbus post-office), OHIO.—Bids will be received by the Clerk of the village of Grand View until March 21 for furnishing labor and materials necessary to construct a sewer with an outlet outside of the corporate limits. John Hinterschied is Clk. On the same date bids will be received for the laying of water mains and water pipes within the limits of Grand View.

LORAIN, OHIO.—Bids will be called for the latter part of next month for the construction of sewers from 18th and 21st Sts.

NILES, OHIO.—A petition is being circulated for the construction of a sewer in Vienna Ave.

WEST LAFAYETTE, OHIO.—It is proposed to sell $20,000 of bonds for the construction of a sewer system.

BENTON HARBOR, MICH.—Plans are being prepared by A. A. Johnson, City Hall, for the construction of a sewerage system. Bids will be received about April 1. The system will consist of about 1,450 ft. of 12-in. crock tile.

ARENZVILLE ILL.—The construction of a sewerage and water-works system is under consideration by the citizens of this place.

HOOPESTON, ILL.—The Council has passed an ordinance providing for the construction of a sewerage system here. The estimated cost is about $70,000.

PORT WASHINGTON, WIS.—The Common Council has decided to issue $35,000 of bonds to complete the sewerage system.

ELY, MINN.—A sewer system including about three miles of tile pipe, is proposed here. The Duluth Engineering Co., Palladio Bldg., Duluth, will prepare the plans. The estimated cost is $20,000.

MINNEAPOLIS, MINN.—Bids were received as follows, on Feb. 10, by the City Council for sewer pipe, f. o. b., trenches: (a) straight; (b) Y's; (c) curve: (a) Red Wing Sewer Pipe Co., Red Wing, Minn.: 6-in., 8 cts. per ft.; 9-in., 16.5 cts.; 12-in., 31 cts.; 15-in., 43.5 cts.; 18-in., 63 cts.; 20-in., 91.5 cts.; 22-in., $1.09; 24-in., $1.29. Blackmore-Post Co., St. Louis, Mo.: 8.3 cts. per ft.; 1.75 cts.; 31.75 cts.; 44 cts.; 63.5 cts.; 95 cts.; 13.2 cts. and $1.35. Streator Clay Mfg. Co., Streator, Ill.: 08.3 cts. per ft.; 17.5 cts.; 31.75 cts.; 44 cts.; 95 cts.; $1.132; $1.35.

(b) Red Wing Sewer Pipe Co.: 9-in., 66 cts. each; 12-in., $1.55; 15-in., $2.15; 18-in., $3.10; 20-in., $4.05; 22-in., $4.85; and 24-in., $5.70. Blackmore-Post Co., 78.75 cts., $1.43, $1.98, $2.86, $4.28, $5.10, and $6.08. Streator Clay Mfg. Co., Streator, Ill.: 65 cts., $1.545, $2.20, $3.00, $4.11, $4.90, and $5.62.

(c) Red Wing Sewer Pipe Co.: 9-in., 55 cts. each; 12-in., $1.35; 15-in., $1.90; 18-in., $2.75; 20-in., $2.98; 22-in., $3.58; 24-in., $4.24; and 6-in., 30 cts. Blackmore-Post Co., St. Louis, Mo.; 59.5 cts. each, $1.405, $1.98, $2.85, $3.10, $3.72, $4.48, and 32 cts. Streator Clay Mfg. Co.: 60 cts. each, $1.28, $1.80, $2.60, $2.98, $3.50, $4.30, and 32 cts.

The following bids were received by the City Council for 200 tons of special castings for sewer construction: Crown Iron Works, Minneapolis, $44 per ton; Minneapolis Steel & Machinery Co., Minneapolis, $45 per ton; Menzel & Jeffrey, Minneapolis, $43.50 per ton; William Bros. Boiler Co., Minneapolis, $40 per ton; Northwestern Foundry, Minneapolis, $39 per ton; Hauser Bros., Minneapolis, $38 per ton; Standard Foundry Co., Minneapolis, $38 per ton; Diamond Iron Works, Minneapolis, $37.35 per ton; Meyer Foundry & Mfg. Co., South Bend, Ind., $33.50 per ton.

ST. PAUL, MINN.—The contract has been awarded to P. O. RYAN by the Board of Public Works for the construction of a sewer in Western Ave., from Thomas to Blair Sts., at $7.115.

WILLMAR, MINN.—The construction of a sewerage system here is under consideration. No definite steps have as yet been taken.

DENVER, COLO.—The contract has been awarded by the Board of Control to the DENVER & PUEBLO CONSTRUCTION CO., Denver, at $16,103, for sanitary sewers in Subdistrict No. 6 of the East Side Sanitary Sewer District No. 1. Other bidders were: Dillon Stone Co., $16,145; National Construction Co., $16,654; S. M. Kerns, $17,081; Gaffy & Keefe Construction Co., $17,781; and the Municipal Construction Co., $16,946. Bids were opened on Feb. 7.

VANCOUVER BARRACKS (Vancouver post-office), WASH.—Bids will be received until 11 a. m., March 3, by Constructing Quartermaster, Vancouver Barracks, for installing a sewer, manholes, house connections, etc., at Vancouver Barracks.

SAN JOSE, CAL.—Bids will be received until 11 a. m., July 3, by the Board of County Supervisors, for constructing a septic tank and sewage disposal system at the County Hospital. W. H. Gastner, Jr., is Engr.

TORONTO, ONT.—We are officially advised that the Board of Control has awarded the contract for the construction of the Low Level Interceptor to the GODSON CONTRACTING CO., Toronto, for Section 1, at $13.10 per lin. ft.; for section 2, at $13.14 per lin. ft.; and for Section 3, $18.30 per lin. ft. C. H. Rust is City Engr. W. D. Blanchard is Asst. Engr. Main Drainage Wks.

VICTORIA, B. C.—Plans for a sewerage system, covering the entire city, have been prepared by the City Engineer. A sum of about $250,000 will in all probability be expended.

GARBAGE DISPOSAL.

*(*Denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—Bids will be received until Feb. 24, by J. Edward Mullen, Supt. of Supplies, 826 Tremont Bldg., for three street cleaning machines, equipped with squeegee attachment for removing grease and dirt from pavements.

Bids will be received until March 1 by Louis K. Rourke, Comr. Pub. Wks., for watering and oiling streets in ten city districts.

BUFFALO, N. Y.—The low bidders for altering and enlarging the city's refuse utilization plant on Hamburg St., near Scott St., are as follows: Masonry and concrete work, Eastern Concrete Steel Co., D. S. Morgan Bldg., $18,519; iron work, C. F. Ernst & Sons, 85 Lathrop St., $31,719; carpentry, Christian Fliel, 1366 Genesee St., $6,671; roofing (concrete), Martin Reiber, 255 Stanton St., $4,039; plumbing, Shaddock & Paddock, 364 Elk St., $2,744. All bidders of Buffalo.

ROCHESTER, N. Y.—Bids were received on the percentage basis as follows on Feb. 1 by the Board of Contract and Supply for street sprinkling during 1911: Bantel & Hartung, 48½%; William H. Sours, 48½%; William Baker, 71%; August Rimmel, 69%. The estimate of the Street Commissioner is $85,889.

TROY, N. Y.—Bids will be received by Board of Contract and Supply until March 3, for the labor, services and plant necessary to dispose of the garbage, refuse, street dirt and waste material of every description gathered in the city by the Street Cleaning Bureau in the districts comprising the First, to and including the 14th, Wards of the city. James M. Riley is Secy. Bd.

McKEES ROCKS, PA.—Bids will be received until March 13 by the Council for the construction of a garbage disposal plant.

PHILADELPHIA, PA.—Permits have been issued to the Penn Reduction Co., which has the city contract for collecting garbage, for the erection of a number of buildings at its plant, 49th St. and Botanic Ave., west of the Schuylkill River. HENRY L. BATON, who was awarded the contract for the work, will erect one 2-story brick drier building, 62 × 54 ft.; one corrugated iron storage building, 46 × 144 ft., and one percolator and tank building, 53 × 78 ft. The cost of all the work is estimated at $22,500.

RACINE, WIS.—The Special Committee of the Common Council, appointed to recommend a system of garbage disposal has reported in favor of the installation of the DeCarie incinerating system. A bond issue for $30,000 to provide for a disposal plant was adopted at the November elections. A. J. Horlick is Mayor.

PASADENA, CAL.—The contract has been awarded to T. W. RITZIMAN for street sprinkling, at 37 cts. per hour night or day. A. F. Charles bid 45 cts. by night and 38 cts. by day.

CALGARY, ALTA.—In addition to the $70,000 incinerator to be erected by the city this year a similar incinerator will be installed during 1912. Noted on Feb. 2.

STREETS AND ROADS.

SOUTH NORFOLK, CONN.—We are officially advised that plans are being prepared for street paving, to cost $30,000. William McMahon is Supt. of Paving. Samuel W. Hoyt is City Engr.

WALLINGFORD, CONN.—We are officially advised that bids will be received about March 15 for relocating, raising and building new highways adjacent to Pistapang Pond. William A. Mackenzie is City Engr.

BUFFALO, N. Y.—Bids will be received by the Department of Public Works until 11 a. m., Feb. 24, for paving various streets. Francis G. Ward is Comr. Pub. Wks.

BUFFALO, N. Y.—The City Council has ordered the paving of the following streets: Josephine St. 24 ft. wide, between Northampton and Urban Sts.; Krupp St., 28 ft. wide, south of Ashley St., with asphalt or brick; Sandford St., 26 ft. wide, between Dewey and Leroy Aves., with German Rock Co.'s standard asphalt; and Milton St., 28 ft. wide, with round edge shale brick on concrete base, between Seneca St. and Pennsylvania R. R.; also the repaving of Illinois St., 30 ft. wide, with asphalt or brick, between Front and Scott Sts. Francis G. Wood, Comr. of Pub Wks., has been directed to advertise for bids.

HUDSON, N. Y.—We are officially advised that bids will be received in March or April for street improvements to cost approximately $25,000. William Wortman is City Clk.

LACKAWANNA, N. Y.—The city has voted to pave Ridge Road, between South Park Ave. and Hamburg Turnpike, with Medina sandstone, at an approximate cost of $126,000.

NEW ROCHELLE, N. Y.—The Common Council is contemplating the widening of North Ave. and the opening of Division st., from Hugenot to Main St., at an estimated cost of $180,000.

NEW YORK, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. Brooklyn, until March 1, for constructing 3,068 sq. yds. granite pavementfi 8,829 sq. yds. asphalt pavement, 51,827 sq. ft. cement sidewalk, and 14,400 lin. ft. curb, and for furnishing 200,000 gals asphalt road oil, 1,600 tons refined asphalt, 8,610 cu. yds. broken trap rock, and 3,235 cu. yds. trap-rock screenings.

NEW YORK, N. Y.—Bids will be received by George McAneny, Pres. Boro. Manhattan, until Feb. 24, for grading, paving, regulating, curbing and flagging portions of various streets; also for furnishing and delivering 600 tons No. 6 paving cement, 10,000 cu. yds. sand and 4,000 cu. yds. washed gravel.

Bids will be received by the Park Board, Charles B. Stover, Pres., until Feb. 23, for furnishing crushed trap rock and trap rock screenings for roads and parkways in the Boro. of Brooklyn; also Hudson River road gravel for parks and parkways in the Boros. of Brooklyn and Queens.

ONEIDA, N. Y.—Official advices are to the effect that bids will be received about May 7 for paving three blocks at a cost of $20,000. George Lebbitts is City Engr.

PLATTSBURG, N. Y.—We are officially advised that bids will be received some time in April or May for paving portions of two streets, at an estimated cost of $8,000. R. H. Rogers is Supt. Pub Wks.

YONKERS, N. Y.—The Common Council has decided on the following improvements: regulating and grading portions of Portland Pl., Montague St. and Montague Pl.; resetting curbstones on both sides of Elm St., from Walnut St. to Van Cortlandt Park Ave., and on a portion of Van Cortlandt Park Ave.; building new sewer in Radford St., from Florence St. westerly about 1,100 ft., connecting with the sewer in Cliff Ave.

ELIZABETH, N. J.—Official advices are to the effect that no bids were received on Feb. 15 for paving and repaving various streets. N. K. Thompson is Street Comr. Noted on Feb. 2.

PLAINFIELD, N. J.—Bids will be received by James J. MacMurray, City Clk., until March 6, for furnishing crushed stone, culverts, etc., for street improvements.

ALIQUIPPA (Everett post-office), PA.—Bids will be received by Walter W. Lester, Boro. Secy., until 7.30 p. m., March 6, for paving a portion of Main St. with vitrified paving brick.

ERIE, PA.—We are officially advised that the contract for paving West 20th St. was awarded on Feb. 13 to JOHN McCORMICK & SON, at 86 cts. per sq. yd. for Class C asphalt pavement. Other bidders were: Mayer Bros. Construction Co., 90 cts.; J. M. Doyle, 95 cts. Noted on Feb. 2.

PITTSBURG, PA.—West Carson St. will be paved this spring at a cost of $186,000. N. S. Sprague is City Engr.

WILSON, PA.—Bids will be received by Joseph O. Spence, Chn. St. Com., until 8 p. m., March 2, for grading, paving, curbing and otherwise improving Mendelsohn Ave., from Charleston to Fourth Aves. Plans and specifications are on file at the office of the Borough Engineer, 1306 Keystone Bldg., Pittsburg, Pa.

EASTON, MD.—Bids will be received by the Commissioners of Caroline and Talbot Counties until Feb. 27, for grading and macadamizing the Dover Bridge Road, for a distance of eight miles, and for constructing a pivot drawbridge and a 70-ft. steel span over the Choptank River, together with all necessary abutments, piers, fender work, etc. Joseph B. Harrington is Clk. County Comrs.

*FORT MONROE, VA.—Bids will be received by Capt. R. B. McBride, Constr. Q. M., U. S. A., until 10 a. m., March 21, for constructing concrete walks, macadam roads, etc., around the new buildings at Fort Monroe.

PORTSMOUTH, VA.—We are officially advised that bids will be received in about 30 days for paving and otherwise improving various streets, at an estimated cost of $200,000. V. O. Cassell, Jr., is City Engr. and Supt. of Paving.

ELIZABETH CITY, N. C.—The city has awarded a contract to PETERS BROS. PAVING CO., Chicago, Ill., at $1.62 per sq. yd., for paving Main St. and other residential streets with asphalt.

AMERICUS, GA.—Plans are being prepared for paving all the streets in the commercial and business sections of the city. The cost of the improvement is estimated at $130,000.

PALATKA, FLA.—The contract for constructing 16,500 sq. yds. of granolithic sidewalks has been awarded to the H. S. JAUDON ENGINEERING CO., of Savannah, Ga., at 80.6 cts. per sq. yd.

CROWLEY, LA.—We are officially advised that the contract for street improvements has been awarded to DE JERSEY & BARNARD, at 12.45 cts. per sq. yd. for sidewalks, and 18.5 cts. per sq. yd. for driveways. C. F. Barber bid 14.1 cts. and 24 cts., respectively. Noted on Jan. 26.

KNOXVILLE, TENN.—Surveys are now being made of the most available route through Knox County for the Bristol to Memphis Highway. C. C. Ahles, Government Highway Engr., is in charge of the work. Noted on Jan. 12.

MEMPHIS, TENN.—An ordinance has been passed providing for the paving with tar macadam of Bellevue Ave., between Autumn and Jackson Ave., at an estimated cost of $15,223.

LOUISVILLE, KY.—Bids will be received until March 1 for laying 35,000 sq. yds. of asphalt and 14 blocks of asphalt repairing. Estimated cost, $70,000. D. R. Lyman is Ch. Engr. Bd. Pub. Wks.

LOUISVILLE, KY.—Press reports are to the effect that a plank speedway, one mile long, to cost $250,000, will be built this Spring. R. Harronn is Advisory Engr.

LOUISVILLE, KY.—We are officially advised that bids will soon be received for 15,000 sq. yds. asphalt paving, at an estimated cost of $40,000. D. R. Lyman is Ch. Engr.

DAYTON, OHIO.—The following estimates for proposed street improvements have been submitted by F. J. Cellarius, City Engr., to the Board of Public Service: Huffman Ave., from Third St. to the corporation line at Overlook Ave., brick, $74,451; sheet asphalt, $118,691. Broadway, from Bolender to Miami Chapel Road, brick, $10,663; asphalt, $13,621; Perry, from Bayard St. to the levee, brick, $3,546; asphalt, $7,438. Lakeview, from Germantown to Florence, brick, $58,648; asphalt, $63,752; macadam, $51,327.

BOWLING GREEN, OHIO.—Bids will be received by the Board of Commissioners of Wood County until March 13 for constructing a stone road.

CANAL DOVER, OHIO.—The city is considering the improvement of Wooster, Third, Factory, and Walnut Sts.

CANFIELD, OHIO.—Preliminary steps have been taken toward paving Broad St.

CANTON, OHIO.—An ordinance has been adopted by the City Council to pave Virginia Ave., at an estimated cost of $19,000.

CINCINNATI, OHIO.—Bids will be received at the office of the Director of Public Service, until noon, Feb. 28, for furnishing the necessary labor and materials for the construction of plank sidewalks in the Eastern and Western Sidewalk Districts of the city. Plans, specifications and proposal blanks can be obtained at the office of the Chief Engineer of the Department of Public Service. John J. Wenner is Clk.

CINCINNATI, OHIO.—Bids will be received by the Board of Commissioners of Hamilton County, until noon, March 10, for building a culvert on the Snyder Road, one-quarter mile north of Cornell Ave., in Sycamore Township. Plans and specifications are on file in the office of the Board of County Commissioners. Stanley Struble is Pres. Bd. Fred Dreihs is Clk.

CLEVELAND, OHIO.—We are officially advised that the contract for grading Broadview Road No. 3 has been awarded to the ENTERPRISE PAVING & CONSTRUCTION CO., of Cleveland, at $28,568. Other bidders were: T. M. Campbell, West Park, Ohio, $29,971; Tubman & Burkhardt, Cleveland, $30,503. Noted on Jan. 26.

CLEVELAND, OHIO.—The lowest bid received for paving University Circle has been submitted by J. R. Bentley. The estimated cost of the work is $20,000.

COLUMBIANA, OHIO.—We are officially advised that the contract for paving Fairfield Ave. and South Main, Duquesne and Friend Sts. was awarded on Feb. 13 to WILLIAM McLANE, at $15,886. Noted on Feb. 2.

COLUMBUS, OHIO.—The City Council has adopted resolutions declaring it necessary to construct cement sidewalks on Sullivant Ave., between McDowell and Sandusky Sts., and on Oak St., between Rose and Morrison Aves. Henry Maetzel is City Engr.; Thomas Brannan, Supt. Paving.

Plans and specifications are being prepared for macadamizing 40 miles of road in Franklin County at an estimated cost of $250,000. Among the roads to be improved are: Avery and Shumaker Roads in Washington Township; Dublin and Unions Pikes, four miles; Washington and Norwich Township road, three miles; Post road, from Dublin to the Union County line, three miles; Dublin road, on the east side of the Scioto River from Hayden Run bridge to Delaware County, 5½ miles; Perry Township pike; Henderson road to Delaware County line, six miles; Westerville road on the Mifflin and Blendon township line to Westerville, four miles; Bethel road in Perry Township, 3½ miles; one mile of road in Brown Township; one mile of Miller road in Pleasant Township. It is proposed to complete the full length of the Winchester under Park's State Aid Law.

EAST LIVERPOOL, OHIO.—It is reported that plans are under way to secure a paved road between Pittsburg and East Liverpool at a cost of $200,000.

Resolutions have been passed to pave St. George St. and Bradshaw Ave.

GENEVA, OHIO.—Press reports are to the effect that the city will soon receive bids for paving two miles of streets with brick on concrete foundation, and stone curb, and for considerable storm sewer construction. W. E. Morgan is City Clk.

PAINESVILLE, OHIO.—Bids will be received in the spring for paving Main St., at a cost of $6,000. John C. Ward is City Engr.

POMEROY, OHIO.—The City Council has adopted a resolution to proceed with the paving of Front St. The estimated cost is $20,000.

SALEM, OHIO.—Property owners on the road between Salem and Winona are raising a fund to pave six miles of the road with brick, without state aid.

TIFFIN, OHIO.—Plans are being prepared for paving Webster, Hudson, Schoenhart and Second Sts. Edward Kuhn is Supt. paving.

WOOSTER, OHIO.—Bids will be received by the Board of Commissioners of Wayne County, until 1 p. m., March 7, for grading and paving seven miles of road in Wooster Township. James L. Zaring is County Audr.

BRAZIL, IND.—The Board of Commissioners of Clay County will receive bids until 11.30 a. m., March 11, for the construction of 7,655 ft. of gravel road in Van Buren Township. E. A. Staggs is County Audr.

The Commissioners of Clay County will receive bids until 11.30 a. m., March 11, for the construction of 10,090 ft. of limestone road petitioned for by W. R. Goddard. E. A. Staggs is County Audr.

COVINGTON, IND.—We are officially advised that the contract for constructing the James I. Brown Road was awarded on Feb. 14, to FRED CUNNINGHAM, at $6,285. Other bidders were: Haynes & Waymirr, $6,989; Albert E. McKee, $7,373; William A. Irvin, $7,843; Martin Bros., $8,000; H. K. Lee, $8,399.

FOWLER, IND.—The Commissioners of Benton County will receive bids until 1 p. m., March 6, for the construction of the Malon R. Bower stone road in the town of Ambia, Hickey Grove Township, including seven different highways in and radiating from the town of Ambia, each highway being about three miles in length. The highways are to be graded, drained and paved with broken stone, according to specifications. Lemuel Skipman is County Audr.

LA FAYETTE, IND.—George W. Baxter, Auditor of Tippecanoe County, will receive bids until 10 a. m., March 10, for the construction of the Higley gravel road, a little less than three miles in length.

MICHIGAN CITY, IND.—We are officially advised that the contract for sidewalk construction has been awarded to SWAN MAGNUSON, at 8.5 cts. per sq. ft. for sidewalks, 17 cts. per sq. ft. for grading and 17 cts. per sq. ft. for filling. Other bidders were: James E. Southard, 8 cts., 25 cts., 25 cts.; William H. Bill, 8 cts., 25 cts., 25 cts., and Vincent Milcarek, 8.75 cts., 24 cts., 24 cts. Noted on Feb. 2.

RICHMOND, IND.—Bids will be received until March 2 by the city for 3,600 yds. of brick paving. H. M. Hammond is Pres. Bd. Pub. Wks. Fred R. Charles is City Engr.

ROCKVILLE, IND.—Bids will be received by the Commissioners of Parke County until 1.30 p. m., March 7, for the construction of a gravel road in Liberty Township. J. E. Elder is County Audr.

WILLIAMSPORT, IND.—Bids will be received by the Commissioners of Warren County until 1 p. m., March 6, for the construction of a gravel road in Warren Township. D. H. Moffitt is County Audr.

CHICAGO, ILL.—Bids will be received by the West Chicago Park Commissioners acting as a Board of Local Improvements, until 4 p. m., Feb. 24, at the office of the West Chicago Park Commissioners in Union Park, Chicago, for the construction of a portion of the Franklin Boulevard, between the north line of the Chicago & North Western Ry. Co.'s right-of-way and the north line of Augusta St., in the city of Chicago, including macadam pavements, asphalt pavements, cement walks, sewer work, water service, grading, excavating and filling, seeding lawns, constructing electric conduits, and electric cable.

DETROIT, MICH.—Bids will soon be received by the Department of Public Works for paving Brandon Ave. with cedar block on concrete foundation with Medina, Berea or any other approved curbing.

*MONROE, WIS.—Bids will be received until March 7 for 5,057 sq. yds. of paving. Plans and specifications are on file with W. G. Kirchoffer, Consult. Engr., of Madison, Wis.

MASON CITY, IOWA.—We are officially advised that a contract for street improvements has been awarded to GEORGE GABLER, of Mason City, at $1.38 per sq. yd. for paving, and 38 cts. per lin. ft. for curbing. Noted on Feb. 9.

WORTHINGTON, MINN.—Bids will be received by the Commissioners of Nobles County until 2 p. m., March 13, for approximately 10,066 yds. of grading. E. C. Pannell is County Audr.

MANHATTAN, KAN.—We are officially advised that the lowest bid received for laying 12,200 sq. yds. of brick pavement on Poyntz Ave., has been submitted by W. W. Cook & Son, of Manhattan, at $29,000, and for laying 16,200 sq. yds. asphaltic concrete pavement on Houston and Fourth Streets, by the Boyd Construction Co., at $28,000. C. S. Gist is City Clk. Noted on Feb. 2.

TOPEKA, KAN.—We are officially advised that bids will be received in about 30 days for approximately 60 blocks of paving, at an estimated cost of $150,000. A. R. Young is City Engr.

ST. LOUIS, MO.—Bids for reconstructing 13th St. from Cass Ave. to its intersection with Eleventh St., will be received by the city until noon, Feb. 25. Plans and specifications are on file at the office of the Board of Public Improvements.

OKLAHOMA CITY, OKLA.—We are officially advised that the contract for paving with sheet asphalt Exchange Ave., from Pennsylvania to Kentucky Ave., and for grading portions of Markwell and College Sts., Ave. C, Broadway, Ave. F, Columbus Ave., and Shield's Boulevard, was awarded on Feb. 15 to the WESTERN PAVING CO. Noted on Feb. 9.

CHEHALIS, WASH.—We are officially advised that the contract for furnishing 75,000 ft. of 8-ft. × 3-in. road plank has been awarded to J. M. GRAY, R. F. D., No. 1, from Winlock, Wash., at $7.50 per M. ft. B. M. Noted on Feb. 2.

BERKELEY, CAL.—The contract for paving Eunice St. between Spruce and Walnut Sts., has been awarded to the OAKLAND PAVING CO. at $5,399.

HERMOSA BEACH, CAL.—The City Trustees have ordered the improvement of portions of Summit Ave., Lyndon, East First, Fourth, Sixth, Eighth, Tenth, 16th and 19th Sts., Circle Court and Circle Ave. E. McCoskey, City Clk., will advertise at once for bids upon grading, asphalt paving and curbing.

LOS ANGELES, CAL.—The Board of Public Works has awarded the contract to H. O. RICHWINE for improving Palm Ave., from Mento to Orange Aves., at 15¾ cts. per sq. ft. for macadam paving, 36 cts. per lin. ft. for cement curb, 17 cts. per sq. ft. for cement gutter, 35 cts. per sq. ft for vitrified block gutter. The aggregate amount is $11,436.

OCEAN PARK, CAL.—Bids will be received by G. G. Watt, City Clk., until Feb. 27, for constructing sidewalks on Second Ave., Broadway and Innes Pl., and for grading, constructing concrete sidewalks, curbs and concrete retaining wall on Balboa Court.

PASADENA, CAL.—Bids have been received as follows by the City Council for paving North Orange Grove from Colorado St. to Los Robles Ave., a distance of 17 blocks, with oil macadam paving, and for the construction of cement gutters thereon: Cox & Matthews, $25,837; D. C. Howard, $27,680; Charles A. Baldwin, $28,390; A. W. McDowell, $29,093; J. C. Kinsman, $30,900.

RIVERSIDE, CAL.—We are officially advised that the contract for improving Park Ave. was awarded on Feb. 4, to the JOHNSON-SHEA CO., at $29,173. The other bidders were: Star Cement Co., $30,986; E. H. Kellog, $31,290; Shull-Tucker & Co., $29,727.

MANUFACTURING PLANTS.

*(*Denotes that this work is advertised in Engineering News.)*

FALL RIVER, MASS.—Articles of incorporation have been filed by the Standard Fabric Co., with a capital stock of $150,000. A 3-story factory, 220 × 88 ft., will be erected. Novelties in laces, braids, etc., will be manufactured. The following officers have been elected: Dr. John Gilbert, Pres.; Edwin V. Livsey, Treas.; Foster R. Green, Clk., and the Bd. of Directors consists of Richard H. Cook, Edwin Livesey, John Gilbert, Robert Place, Lawrence L. Holden, John Fielden, Foster R. Green, of this city, and Albert A. Jencks and James C. Potter, of Pawtucket, R. I. Work will soon start.

SOUTH LAWRENCE (Lawrence post-office), MASS.—Willis Hill, of Nashua, N. H., has purchased an acre of land on Merrimack St., South Lawrence, for the purpose of erecting an extensive addition to his plant, it is stated. The price paid was $25,000.

NEW BRITAIN, CONN.—Estimates for the proposed factory to be erected on Lake St. for the National Spring Bed Co. are now being received. The plans call for a brick building, 44 × 116 ft., of heavy mill construction, five stories high, the top story to be concrete steel and fireproof. There will also be a boiler house, 30 × 40 ft. one-story high. Unkelbach & Perry, of New Britain, are the Archs.

PLAINVILLE, CONN.—The TORRINGTON BUILDING CO. has been awarded the contract for erecting the proposed brick factory buildings of the Trumbull Electric Mfg. Co. The plans, which are by Unkelbach & Perry, Archs., of New Britain, call for two 4-story buildings, 40 x 106 ft., and 63 × 72 ft., a 2-story engine room, 25 × 40 ft., a 1-story boiler house, 43 × 44 ft., stair and elevator towers and a vault, all four stories high; also a radial brick stack, 100 × 4 ft. Mill construction will be used throughout. Noted on Jan. 26.

SOUTHINGTON, CONN.—The Peck, Stow & Wilcox Co. has applied to the State Legislature for the right to increase its capital stock by $250,000, which will make a total of $1,500,000. The increase is to be used for the erection of a factory here.

BROADALBIN, N. Y.—The Broadalbin Knitting Co., Ltd., will build an addition to its dye-house. It will be of concrete block construction. Plans for the same have been completed.

BUFFALO, N. Y.—M. A. Cwiklinski, 35 Lathrop St., will build an extensive planing mill at Syracuse and Hawlett Sts., and the New York Central R. R. Belt Line. Plans for the same are now being prepared.

NORTH TONOWANDA, N. Y.—The Keith Paper Co. of Maine, in which Charles Upson, of Lockport, is interested, plans the erection of a plant on the Niagara River, near here, according to reports.

It is reported that Spalding Bros., of North Rochester, N. H., contemplate establishing a plant here.

The Buffalo Bolt Co. is planning the erection of an extensive addition to its present plant on Oliver St. Construction will soon start.

SYRACUSE, N. Y.—Contracts have been awarded for the proposed plant of the Crouse-Hinds Co., manufacturers of electrical apparatus, to be erected in Wolf St., as follows: McLAUGHLIN & BURCHILL, masonry; HUEBER BROS., carpentry; VAN DEUSEN & SON. The main building is to be 246 × 283 ft. and three stories high. The cost will be about $150,000. Noted on Dec. 15.

ELIZABETH, N. J.—Official advices are to the effect that Runkel Bros., cocoa and chocolate manufacturers, 451 West 30th St., New York, are planning to establish an extensive plant in Elizabeth. Arrangements are now being made.

PATERSON, N. J.—The general contract to erect a 3-story brick factory, 50 × 115 ft., on Reservoir Ave., for the Casper Silk Co., 1 Market St., Paterson, has been awarded to P. S. VAN KIRK & CO., Fulton St., and the masonry contract has been given to WILLIAM H. PLATT & CO., 152 Market St.

SOUTH ELIZABETH (Elizabeth post-office), N. J.—We are officially advised that the Linde Air Products Co., 155 Chandler St., Buffalo, N. Y., has increased its capital from $500,000 to $1,000,000. The company has purchased sites at South Elizabeth and North Trafford, Pa., and is proceeding at once wth the erection of two large factories. It is anticipated that these two plants will be completed and in operation by next June. Contracts have been let for the buildings and for such equipment as the company does not make at its Buffalo shops. The company already has two plants in operation—one in Buffalo and one in East Chicago—but has found that it needs these additional oxygen plants. The McCLINTIC-MARSHALL CONSTRUCTION CO., of Rankin, Pa., are the contractors. The erection of these two plants will involve an outlay of $500,000.

KENSINGTON (Philadelphia post-office), PA.—The American Can Co., a subsidiary concern of the U. S. Steel Corporation, has secured an option to purchase part of the old Neafie & Levy shipbuildi[illegible] plant, at the corner of Beach and Palmer [illegible] Estimates are being received for the er[illegible]on of two 4 or 5-story buildings, which w[illegible]e erected on a lot 340 × 114 ft., when th[illegible]sent structures on the site, an old fo[illegible]y and machine shop, are demolished. [illegible] estimated cost is $200,000.

NEW CASTLE, PA.—It is [illegible]d that the Standard Steel Car Co., pla[illegible] construct an addition to its present pla[illegible]ere. Plans, etc., have been prepared an[illegible]rangements for the erection are being m[illegible]

NEW KENSINGTON, PA.—[illegible] are officially advised that the contr[illegible] to enlarge the plant of the National L[illegible] & Oil Co. of Pittsburg, Pa., at New K[illegible]ngton, has been awarded to WILLIA[illegible] P. CARMICHAEL, Liggett Bldg., St. [L]ouis, Mo. The Unit Construction Co., Lig[illegible] Bldg., St. Louis, is the Engr. It will be reinforced concrete construction and will [illegible] approximately $95,000. Constructio[illegible] work has started.

PHILADELPHIA, PA.—The [illegible] & Collins Co. has had plans prepared [illegible] 9-story factory, 65 × 136 ft., on the [illegible] side of Tioga St., east of Richmond [illegible] William Steele & Sons Co., 1600 Arch [illegible] are estimating on the work. Cost, $[illegible]

PITTSBURG, PA.—The plant [illegible] Union Steel Castings Company, in Bu[illegible] St., near the Sharpsburg bridge, will sho[illegible] be enlarged by an addition to cost $[illegible], providing employment for 500 extra [illegible] The company recently bought 3⅛ acre[illegible] ground adjoining its present property [illegible] the Pittsburg Railways Co. This sale [illegible] is said prevents the castings company fr[illegible] locating a new plant near Tarentum, where [illegible] had optioned 20 acres.

The Company was organized and built the present plant in 1899. The plant [illegible] equipped with two 25-ton acid, open hearth furnaces, with a capacity of 18,000 tons of steel castings per year, running on single turn. Its product is largely of specialties, such as vanadium steel castings, overhead engine frames, driving wheels, centers and general locomotive castings. The capacity of the works will now be increased to meet the growth of the business. Officers of the company are: C. C. Miller, Pres.; G. W. Smith, Vice-Pres.; Samuel H. Church, Vice-Pres.; J. P. Allen, Secy., and George W. Eisenbeis, Treas.

SCOTTDALE, PA.—According to reports the Keystone Steel Rail Co. has received a charter to build a plant at Keystone City, a suburb of this city. The incorporators are: J. A. Stauffer, of Scottdale; Algernon Granville, of Pittsburg and John M. Boucher, of Greensburg.

SEAFORD, DEL.—The ice manufacturing plant of which Jesse A. Wright is the owner, which was destroyed by fire a short time ago, will be rebuilt, it is announced.

WILMINGTON, DEL.—The WILMINGTON SASH & DOOR CO., has been awarded contract to furnish the lumber and mill work for the proposed I. X. L. laundry building, to be erected at Sixth and Orange Sts., for James S. Hoey.

BALTIMORE, MD.—Arrangements are being made by John P. Brandau for the erection of a 2-story factory building on York Road and 25th Sts.

BASIC CITY, VA.—The Basic Woolen Co. has been organized with $75,000 capital stock, with the following officers Hiram Dawson, Pres.; W. H. Gardiner, Treas.; M. E. Bean, Secy. It is the intention of the company to erect a factory.

LYNCHBURG, VA.—The Thornhill Wagon Works has awarded a contract to C. W. HANCOCK & SON, of Lynchburg, to erect the main factory building, 100 × 600 ft.; 1-story of mill construction. It will have brick walls, concrete floors and will be equipped with automatic sprinkling apparatus. The cost is about $60,000. Smaller structures will be erected later.

PARKERSBURG, W. VA.—It is announced that the Baldwin Tool Works plan to erect another shovel plant similar to the one recently completed. The structures include a main building, 63 × 683 ft., with wings, 53 × 148 ft.; a steel shed, 53 × 71 ft.; a machine shop, 53 × 53 ft.; a pickling shop, 32 × 52 ft. and a handle shed, 53 × 202 ft. They will be of steel and brick construction. Frank M. Baldwin of the Baldwin Forging & Tool Co., of Columbus, Ohio, is Pres. Estimated cost, $300,000.

GREENSBORO, N. C.—The Yellowpine Lumber Co., incorporated with $25,000 capital stock has purchased timber rights on about 2,000 acres of land in Onslow County and will install a saw mill, dry kilns and planing mill with a daily capacity of 15,000 ft. finished lumber. The building and machinery arrangements have been completed. The officers are: N. R. Wood, Pres.; T. W. Alderman, Vice-Pres.; M. M. Alderman, Secy.; E. R. Wharton, Treas., with main offices at Greensboro.

RALEIGH, N. C.—The Wennonah Cotton Mills Co., of Lexington, has been chartered with an authorized capital stock of $125,000 and plans the erection of a mill in Raleigh, it is stated. The incorporators are: William E. Holt, W. E. Holt, Jr., and Joe V. Moffitt.

COLUMBIA, S. C.—The U. S. Aero Publicity Co., is being organized for the purpose of establishing an airship plant here. Victor Jossenberger of Toronto and Buffalo is the chief promotor, while E. Ward, also of Toronto and W. Howard, of Columbia, are also interested. The capital is $500,000.

MIAMI, FLA.—Chase & Co. will erect a wood and corrugated iron building and install equipment for packing tomatoes. It will have a daily capacity of six cars of tomatoes. They will also erect a corrugated iron building and establish a packing plant, with a daily capacity of 1,500 to 2,000 crates of vegetables.

BIRMINGHAM, ALA.—Articles of incorporation of the Southern Asphalt & Construction Co., which will erect a $30,000 plant in Birmingham, employing more than 100 men, have been filed, it is stated.

BIRMINGH… ALA.—Advices are to the effect that th… E. Hood Lumber Co., of Birmingham, … build one of the largest planing mills … Alabama, with 306 ft. frontage on the … nta, Birmingham & Atlantic Railroad. T… cost of the mill will be from $75,000 to …000, and an office building and other st…ures will cost about $100,000. Besides the …ning mill, the company will conduct a …eral building material and lumber bu…s at that point. About 150 men will b… mployed at the plant. I. E. Hood, is P…

MONTG… RY, ALA.—M. B. Kendrick & Co., of C…nati, Ohio, plan to establish a soap fa… here, it is stated.

NEW …EANS, LA.—Plans are being prepared … F. W. Crosby, Arch., Denegre Bldg., fo… erection of a shoe factory for the Line… Shoe Co., of which H. Linenberg is … It will be located in the square …ied by Claiborne, Mandeville, Marigny … North Robertson Sts., fronting on Nor… aiborne Ave. Plans …lso being drawn by Toledano & Wogan, …hs., Perrin Bldg., for the construction … a brewery on Press St., between C…rne Ave. and North Robertson St., for … Union Brewery Co.

BRIST… TENN.—The A. L. Womack Co. has been …ganized and chartered with $25,000 cap… and will erect a canning plant in Bris… according to reports.

LOUIS…LLE, KY.—Jones Bros., Castleman & …kemore, have filed plans and specifications … the Building Inspector's office for a perm… to erect a factory at Eleventh and Magnol… Sts. to adjoin the present factory at that place. The factory will cost $18,000 and w… be constructed of brick, three stories in front and two stories in the rear. The dimensions are 382 ft. deep and 52 ft. wide.

AKRON, OHIO.—It is announced that the Wise Furnace company has purchased from the George W. Carmichael Co., the property formerly owned by the J. F. Seiberling Co., and the India Rubber Co., located between Lincoln St., Forge St. and the railroads. The property comprises about three acres. The consideration was $15,000. The company will build a factory on this property, plans for which are now under way. It will take the place of the ruins of the India Rubber Co.'s plant, destroyed by fire some years ago. Besides the factory there will be machine shops and warehouses. It is planned to have the plant completed by the first of next year. Work will be started on the actual building early in the summer.

BREMEN, OHIO.—The Bremen Mfg. Co., has been organized with a capital stock of $50,000, and plans to establish a manufacturing plant. P. D. Turner is interested.

CARTHAGE (Cincinati post-office), OHIO. —The Union Thread Co., Eighth and Main Sts., Cincinnati, plans to construct a 3 or 4-story concrete factory here on the east side of the "Big Four" R. R. The site which was recently purchased, has a frontage of 200 ft. along the track and is 100 ft. deep.

COLUMBUS, OHIO.—The Brightman Mfg. Co., of Shelby, whose plant was burned last December, has decided to locate in Columbus. Seven acres of land south of Marion Road and east of Parsons Ave., have been acquired and the company will build a factory to cost, including machinery, $100,000. The officers are: L. H. Brightman, Pres., of Cleveland; G. F. Brightman, Vice-Pres.; C. W. Brightman, Secy., and C. W. Brightman, Treas., all of Shelby.

COLUMBUS, OHIO.—The National Refining Co., of Cleveland has had plans prepared for the erection of a branch plant in this city.

COSHOCTON, OHIO.—J. F. Meek, contemplates erecting a factory at Walnut and South Third Sts., to cost $17,000 it is stated.

MAUMEE, OHIO.—The Harbauer-Marleau Co., catsup, pickle and vinegar manufacturers, of Toledo, plans to establish a canning plant in Maumee, it is reported.

SOUTH WEBSTER, OHIO.—A company is to be organized here, according to reports, to be known as the South Webster Clay Products Co., for the purpose of establishing a brick plant here. W. E. Tripp is interested.

HUNTINGTON, IND.—An addition, three stories high, 50 × 140 ft., is to be built to the shoe factory of Barker, Brown Co. The company recently increased its capital stock from $100,000 to $250,000. Walter Braselton is Supt.

GRAND RAPIDS, MICH.—Plans have been completed by Pierre Lindhout, Arch., Ashton Bldg., for the construction of a factory, 170 × 100 ft., for the Imperial Furniture Co. The contract will be awarded about March 1. The estimated cost is $80,000.

MENOMINEE, MICH.—According to reports the Empire Portland Cement Co., of Portsmouth, Ohio, will build a $500,000 plant here which will employ 200 men.

WYANDOTTE, MICH.—Mildner & Eisen, Hammond Bldg., Detroit, will soon be ready for estimates for the addition to be built to the brewery of Frank Marx, of Wyandotte. It will be constructed of reinforced concrete.

MANITOWOC, WIS.—The Aluminum Goods Mfg. Co. has voted to expend $60,000 in new buildings here as the result of the consolidation of its eastern and western manufactories. Most of the equipment will be taken from the New Jersey plant. George Vits, of Manitowoc, is Pres., and Joseph Koenig Supt.

MILWAUKEE, WIS.—Frederick Gatterdam, Arch., of Chicago, Ill., is preparing plans and specifications for the proposed plant of the Home Brewing Co., of Milwaukee, a cooperative corporation composed of Milwaukee saloonkeepers. The plant will consist of a main building 250 × 175 ft. and 140 ft. high; a bottling house; a soda and soft beverage manufactory; an ice-house, with complete ice-making and refrigerating equipment; a garage, stables and office and administration building. Cost, $500,000. It will be of reinforced concrete construction throughout. Bids will be received by Carl Heim, Secy., 319 Third St., Milwaukee, as soon as specifications are completed by the architect which is expected to be about March 1. Contracts will be awarded about March 20 or April 1. Noted on Feb. 9.

Klubertanz Bros., galvanized iron and tin manufacturers, are planning to erect a triangular factory building at Fond du Lac Ave. and 23d St. The dimensions will be 90 × 70 ft. F. W. Andree is the Arch.

DES MOINES, IOWA.—The American Concrete Brick Co. plans to establish a factory to manufacture the machines invented by Frank R. Stehm for the making of enamel concrete brick. J. C. Mardis is Pres.

BRAINERD, MINN.—The Northern Paper Co. is to erect a steel and cement paper mill on the east side of the Mississippi River at the Brainerd dam. The cost will be about $450,000. C. I. McNair is Supt.

DULUTH, MINN.—A site has been selected for the cement factory to be established by the Speakes Lime & Cement Co., it is reported. Harry E. Speakes, former Mgr. of the Superior Mfg. Co., is the head of the project.

ST. PAUL, MINN.—The Adsit Telephone Mfg. Co. has been incorporated here with $500,000 capital. The concern will engage in the manufacture of rural telephones, and will construct a factory here. The following St. Paul men are interested: G. N. Bergren, G. E. Adsit and Frank Adsit.

BOONVILLE, MO.—The Phoenix-American Corn Cob Pipe Co. plans to construct a corncob pipe plant here to help meet the world's demand for cob pipes. It will employ 150 persons.

KANSAS CITY, MO.—The United Drug Co., of Boston, Mass., plans to erect a branch plant here to cost $750,000, it is reported. The officers include: Louis K. Liggett, Pres., and Louis I. Schreiner, Vice-Pres., of Boston; Fred S. Rogers, of Middletown, N. Y., Vice-Pres.; Walter A. May, of Pittsburg, Dir.; Harry A. Dockum, of Wichita, Kan., Dir. W. M. Federman, of Kansas City, owner of several drug stores, is also a Dir.

ALVIN, TEX.—A company has been organized here with a $15,000 capital to build an ice factory and cold storage plant. A site near the fig preserving plant has been selected and work is to begin on the buildings at once. Those interested in the enterprise are: W. C. Hunt, T. P. Majors, J. A. Owen, of Alvin, L. H. Wallace, of Houston, and H. P. Rhodes, of Cuero.

ELKHART, TEX.—I. J. Sander, of Jacksonville, Tex., will erect a saw-mill near here.

HOUSTON, TEX.—The contract to erect a 3-story and basement plant for the Armour Packing Co., at Fannin St. and Commerce Ave., has been awarded to C. C. WENZEL, 806 Texas Ave., Houston. It will be 100 × 81 ft. and will cost $50,000. Noted on Feb. 2.

HUMBLE, TEX.—It is announced that the Producers' Oil Co. will rebuild its machine shops at this place, which were recently destroyed by fire, causing a loss of about $10,000.

PLAINVIEW, TEX.—Charles Malone, of this place, will install a 4-stand cotton gin here. The erection of a cotton-seed oil mill is also contemplated.

TAYLOR, TEX.—Preliminary steps have been taken toward establishing a ginning plant here. R. O. Bradford, Secy. of the Farmers' Warehouse Co., is interested. Cost, $25,000.

HARTSHORNE, OKLA.—The Choctaw Portland Cement Co. has been chartered with $1,200,000 capital stock to build a plant costing $700,000 and to erect a stone crusher. A branch railway to the site, three miles long, will be constructed. The officers are: C. B. Blake, Pres., of Hartshorne; B. E. Allison, Vice-Pres., of Kansas City, Mo.; E. H. Jayne, Treas., of Oklahoma City. The general offices are in the Insurance Bldg., Oklahoma City.

TULSA, OKLA.—J. W. McCloud, it is stated, is interested in a plan to build a Portland cement plant.

*TUCUMCARI, N. MEX.—M. B. Goldenberg, of Tucumcari, will install a factory here for the manufacture of rope and bagging from bear grass. Machinery for stripping the leaves of the plant and for manufacturing the fibre will be installed.

SANTA ANA, CAL.—J. M. Cain, 1906 North Main St., J. T. Wilson, and others, have formed a company to erect a laundry plant here. Construction work will begin soon.

WELLAND, ONT.—The Page Hersey Pipe Mills plan to double the present capacity of their plant.

The Ontario Iron & Steel Co. plant will also double its present force of 350 men. It is said that $1,000,000 will be spent in enlarging its plant.

ST. BONIFACE, MAN.—George M. Ellis is negotiating with the City Council for the establishment of an automobile factory to employ 5,000 hands, costing $1,250,000. An option has been secured on 30 acres of land east of the Seine River. J. R. Cote is City Clk.

MABABI, (Sonora) MEX.—A syndicate composed of L. M. Scribner of San Francisco, Richard E. Abenheim, of London, England, W. H. Moore of Mababi, and others will install a lumber mill at this place. It will also install a canning factory and construct about 60 miles of railway to give its land and other holdings a transportation outlet. Mr. Moore is Mgr.

TOLTECA (Hidalgo), MEX.—The Compania La Tolteca de Cemento Portland, S. A., of Tolteca, will double the capacity of its cement plant at this place, bringing the output up to 200 tons per day.

MISCELLANEOUS CONTRACTS.

*(*Denotes that this work is advertised in Engineering News.)*

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

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*DREDGING.—Portland, Me.—Bids will be received until noon, March 23, by Lt.-Col. W. E. Craighill, Corps Engrs., U. S. A., Portland, for dredging in Camden Harbor, Me.

ELIMINATION OF GRADE CROSSING.—Boston, Mass.—Plans are made for the elimination of a grade crossing at Orient Heights, East Boston, by the Boston, Revere Beach & Lynn R. R. But one crossing is involved, but four side streets are to be raised. J. P. Snow is Ch. Engr., Boston & Maine R. R. Co., lessee.

DREDGING.—Boston, Mass.—Bids will be received until 11 a. m., March 25, by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for dredging at navy yard, Boston.

IMMIGRATION STATION, PIER.—Boston, Mass.—An immigrant station will be built at East Boston soon near the Cunard Docks. Estimated cost, $125,000. A new pier is also proposed just east of the new station, and a bill is being pushed to authorize the State to build it. Estimated cost, $1,000,000. D. O. Ives, Chamber of Commerce, is interested.

IMPROVING HARBOR.—Boston, Mass.—The immediate expenditure of $2,000,000 is being urged for improving Boston Harbor along the line of better docking facilities, opening up piers now built, and the construction of new piers. D. O. Ives is Chn. Com. Chamber of Commerce.

DREDGING.—Providence, R. I.—Bids will received until Feb. 25 by the Board of Contract and Supply for dredging in portions of the Wamasquatucket, Moshassuck and Providence Rivers.

RIVER IMPROVEMENT.—Providence, R. I.—Tentative plans for the permanent improvement of navigation in the Seekonk River will be prepared by the City Engineers of Providence, Pawtucket and Central Falls, acting in conjunction with the engineers of the New York, New Haven & Hartford R. R., and submitted to the Special Seekonk River Comn. F. W. Easton, Chn.

BOARDWALK.—Brooklyn, N. Y.—It is reported that a company known as the Greater Coney Island Co. has been organized with Desmond Dunne, Pres., 176 Montague St., Brooklyn, to construct a boardwalk about two miles long from West Fifth St. to West 35th St., Sea Gate.

ASPHALT, TRAP ROCK, ETC.—New York, N. Y.—Bids will be received until 11 a. m., March 1, by Alfred E. Steers, Pres. Boro. Brooklyn, for furnishing and delivering 1,600 tons of 2,000 lbs. each of refined asphalt, 8,160 cu. yds. of broken trap rock and 3,235 cu. yds. of trap rock screenings.

LEAD.—New York, N. Y.—Bids will be received by Kingsley L. Martin, Comr. of Bridges, until 2 p. m., Feb. 23, for furnishing and delivering white lead and red lead to the Williamsburg Bridge.

RETAINING WALL, PLAYGROUND.—New York, N. Y.—Bids will be received by the Park Board, Dept. of Parks, until 3 p. m., March 2, for grading grounds and constructing a retaining wall on the Clay Ave. side of Claremont Park, Boro. The Bronx, and for the construction of the Red Hook playground, at Richards King, Dwight and Pioneer Sts., Boro. Brooklyn.

CEMENT, SAND, GRAVEL.—New York, N. Y.—Bids will be received until 2 p. m., Feb. 24, by George McAneny, Pres. Boro. Manhattan, for furnishing and delivering 800 bbls. of Portland cement, 600 tons of No. 6 paving cement, and 4,000 cu. yds. of washed gravel.

BOARDWALK.—Wildwood, N. J.—The citizens on Feb. 9 voted to issue $20,000 of bonds for boardwalk improvements. L. M. Rice, of Wildwood, is Engr.

GRAND STAND.—Allentown, Pa.—A steel or concrete grand stand, it is reported, will be erected by the Allentown Fair Association on the fair grounds. Estimated cost, $100,000.

MONUMENT.—Guilford, N. C.—The House of Representatives, on Feb. 7, passed a bill which previously had passed the Senate, appropriating $30,000 for a monument at Guilford to Maj.-Gen. Nathaniel Greene and the officers and soldiers who participated in the battle of Guilford. The Senate gave $25,000 for a statue only to Greene. The House enlarged the scope of the bill so as to honor all who fought in the battle and increased the Senate's appropriation $5,000. Plans for the monument will be approved by the Secretary of War and officers of the Guilford Battle Ground Company.

GRAVEL OR ROCK, SAND, CEMENT.—Jacksonville, Fla.—The Reinforced Concrete Culvert Pipe Co., Jacksonville, desires prices on ½-in. river gravel or crushed rock, clean, sharp river sand and any of the standard brands of Portland cement in carload lots, f. o. b. cars Jacksonville; also 3-in. mesh-welded wire fabric., No. 10 wire both ways, 48-in. wide in lots of 20,000 to 30,000 sq. ft. Address Reinforced Concrete Culvert Pipe Co., Jacksonville.

DRAINAGE CANALS.—Cleveland, Miss.—Bids were received by the Board of Drainage Commissioners of Bolivar County, Mississippi, at the office of Sillers, Owen & Sillers, Att'ys, Cleveland, on Feb. 16, for the excavation of the following drainage canals: Holmes Lake, length, 7.2 miles, average cut 10.2 ft., bottom widths 10, 14 and 16 ft.; excavation, 388,000 cu. yds.; Snake Creek, the channel of Snake Creek is sufficiently large to discharge all the water falling in its water-shed, but for the fact that it is congested by standing timber, logs and debris of all sizes. Bids will be asked for clearing 21 miles of Snake Creek between Holmes Lake cut-off and the Bogue Phalia; Mound Bayou, length, 8.7 miles; average cut, 8.3 ft.; bottom widths, 10, 15 and 20 ft.; excavation, 320,000 cu. yds.; Jones' Bayou Cut-off, length, 8 miles; average cut, 11.6 ft.; bottom widths, 4 ft.; excavation, 34,000 cu. yds.; Goose Lake Cut-off, length, 1.7 miles; average cut, 9.3 ft.; bottom widths, 10 ft.; excavation, 71,000 cu. yds. Cypress, oak and gum timber will be encountered. The character of the soil to be encountered is clay loam and sand loam: Holmes Lake: W. S. Coleman & Sons, Paragould, Ark., 11 cts. per cu.-yd.; R. H. & G. A. McWILLIAMS, 1600 Steger Bldg., Chicago, Ill., 10.99 cts. (awarded contract); O. O. McDonald, Elaine, Ark., 9.96 cts.; N. C. McGinnis, Bement, Ill., 9.9 cts.; J. S. Kochtitzky, Cude, Miss., 12 cts. Mound Bayou: W. S. Coleman & Sons, Paragould, 13.75 cts.; R. H. & G. A. McWILLIAMS, 1600 Steger Bldg., Chicago, Ill., 10.99 cts. (awarded contract); O. O. McDonald, Elaine, Ark., 9.96 cts.; J. S. Kochtitzky; Cude, Miss., 12 cts. Goose Lake Cut-off: R. H. & G. A. McWILLIAMS, 1600 Steger Bldg., Chicago, Ill., 10.99 cts. (awarded contract); O. O. McDonald, Elaine, Ark., 30 cts.; J. S. Kochtitzky, Cude, Miss., 12 cts. Jones' Bayou Cut-off: D. O. McDonald, Elaine, Ark., 49.75 cts.; J. S. Kochtitzky, Cude, Miss., 12 cts.; R. H. & G. A. McWILLIAMS, 1600 Steger Bldg., Chicago, Ill., 10.99 cts. (contract awarded). The contract for Snake Creek was let to J. P. FINLEY, of Arkansas City, Ark., at $1,600 per mile. W. W. Boone, Cleveland, is Ch. Engr.

SHEDS.—New Orleans, La.—The United Fruit Co., it is reported, will spend about $250,000 on improvements and extensions to its sheds and will establish coaling and heating plants in connection with its cars for shipping fruit. The sheds will be 21 ft. high and will be of steel construction.

*EXTENDING JETTIES.—New Orleans, La.—Bids will be received by Lt.-Col. Lansing H. Beach, Corps, Engrs., U. S. A., until March 17, for extending the jetties at Southwest Pass, Mississippi River.

GRAND STAND.—Shreveport, La.—A steel grand stand, it is reported, will be erected by the Shreveport Fair Association.

LEVEE.—Obion, Tenn.—Surveys have been completed for the construction of a levee on the north side of the Obion Run bottoms near here. It will be built in connection with the plans for straightening and draining the Obion River. Opposite Obion these levees will be about 1,500 ft. apart and 10 ft. high. P. E. Fletcher, Union City, Tenn., is Engr.

LEVEE.—Hamilton, Ohio.—John W. Hill, Consult. Engr., of Cincinnati, Ohio, has prepared plans for the construction of a levee along the Miami River from Old River to below Peck's addition. The plans favor the idea of the canalization of the river. He proposes to dredge the river and keep it within its channel. This will lower the flood stage several feet. Estimated cost, $240,000, of which the city would pay $144,703, the county $42,196 and the property owners and railways the balance.

DITCH.—Huntington, Ind.—The Commissioners of Huntington and Wells Counties are preparing to let a contract for a ditch running through portions of both counties and emptying into Rock Creek.

DITCH.—Martinsville, Ind.—Bids will be received until Feb. 27 by Henry A. Blunk, Comr. of Construction, at the office of the County Surveyor, for the construction of the F. C. Cook ditch.

DITCHES.—South Bend, Ind.—Bids will be received until 10 a. m., Feb. 25, by Ralph E. Keller, Construction Comr., South Bend, at the office of the County Surveyor, for the construction of drainage ditches petitioned for by Willard Crofut and others.

DRY DOCK.—Manistee, Mich.—The Manistee Iron Works, it is reported, will construct a dry dock here. Estimated cost, about $500,000.

EMBANKMENT.—Murphysboro, Ill.—Bids will be received until Feb. 24 by the Commissioners of Degonia and Fountain Bluff Levee and Drainage District for the construction of 550,000 cu. yds. of earth embankment, four concrete and steel locks, two concrete-steel culverts, 33 steel pipe drains with concrete head walls and all steel doors, and 270 cu. yds. of reinforced concrete walls; also for raising and strengthening a reinforced concrete lock with steel doors. Joel Dunn is Engr., Fordyce, Ill.

COAL DOCK.—Green Bay, Wis.—The Directors of the Northern Paper Mills Co. have been authorized to build a coal dock on Fox River, adjoining the company's plant, near the entrance to Green Bay, to handle its own fuel supply.

DRAIN.—Boone, Iowa.—The Board of Supervisors of Boone County have awarded the contract to the BEAVER CO-OPERATIVE CO. for furnishing all materials for Drain No. 78 in Beaver and Amaqua Townships, at $9,127. Seventeen bids were received for the work.

DRAIN.—Fort Dodge, Iowa.—The contract for constructing Drain No. 69 has been awarded to J. W. BOYER, of Fort Dodge, by the County Commissioners, at 6.67 cts. per cu. yd., on an estimated yardage of 345,646 cu. yds. Bids were opened on Feb. 15.

DRAIN.—Nevada, Iowa.—The County Board of Supervisors of Story County are considering the construction of a drain to be known as Milford Township Drain No. 32. Estimated cost, $94,000.

DRAINAGE.—Webster City, Iowa.—Farmers in Ellsworth, Lynn and Clear Lake Townships have petitioned the Board of County Supervisors, Webster City, for the construction of a large drainage project in Hamilton County. Estimated cost, $100,000. It is reported that the greater portion of work will require tile, there being only about $15,000 for open ditch work.

DOCK.—Duluth, Minn.—The Canadian Northern Ry. Co., it is reported, will construct a dock and warehouse here. Estimated cost, $500,000. M. H. MacLeod is Gen. Mgr., Winnipeg, Man.

LIMESTONE.—Minneapolis, Minn.—Henry N. Knott, City Clk., will receive bids until 7.30 p. m., Feb. 24, for 30,000 cu. yds. of crushed limestone for use in the construction of the filtration plant.

SEWER BRICK.—Minneapolis, Minn.—Bids have been received as follows by the City Council for 2,000,000 sewer brick: Wisconsin Repressed Brick Co., 1,000,000 at $6.75 f. o. b., Menominee, and 1,000,000 f. o. b. trenches.

DITCH.—Warren, Minn.—The contract has been awarded to GEORGE CASTLE, of Crookston, Minn., by the County Commissioners for the construction of County Ditch No. 22, 100,486 cu. yds. of dirt, at 10 cts. per cu. yd.

DIKE.—Topeka, Kan.—The County Commissioners, according to press reports, on Feb. 3 cancelled the contract for the construction of the south side dike made with Haskins & Ramsey, and awarded a new contract for the work to JONES BROS., of Leavenworth, Kan., at $10,500.

CULVERT PIPE.—Armour, S. Dak.—Bids will be received until March 1 by the County Auditor for furnishing f. o. b., any railroad station in Douglas County, all galvanized corrugated American ingot iron riveted culvert pipe. Alternate bids are asked for steel and metal culvert pipe to be used during this year.

CEMENT.—Corpus Christi, Tex.—Bids will be received until Feb. 25, by the city, for 5,000 bbls. of Portland cement. E. Cubage is City Controller.

CHANNEL WORK.—Galveston, Tex.—Contracts will soon be let by Maj. George P. Howell, Corps Engrs., U. S. A., Galveston, for widening and deepening Galveston Channel. Congress has approved an appropriation of $300,000 for this work.

ICE PLANT.—Matagorda, Tex.—A. B. Lorino, of Matagorda, will install an ice plant here.

DRAINAGE WORK.—North Yakima, Wash.—Walter W. Weir, U. S. Drainage Engr., North Yakima, under the direction of the Drainage Investigation, U. S. Dept. of Agriculture, has completed surveys and estimates for the draining of 4,100 acres of irrigated land in Moxee Valley, lying east of here. The plans call for about ten miles of open ditch, with 4 and 6-ft. bottom width, 8 to 9 ft. deep and 1½ to 1 side slopes. Estimated cost, $70,000.

TUG BOAT.—Portland, Ore.—Bids will be received until 4 p. m., Feb. 24, at the office of the Port of Portland, for the construction and equipment of a stern-hull, stern-wheel tugboat.

WATER FRONT IMPROVEMENT.—Alameda, Cal.—The city has decided to improve the water front. W. H. Ney, Mayor, has appointed a committee to formulate plans.

PIER.—Huntington Beach, Cal.—Charles W. Corbaley, of Los Angeles, Cal., on behalf of the Holly Sugar Co., of Huntington Beach, has applied to the War Department for permission to build a pier at Huntington Beach extending 600 ft. into the ocean, to carry the outfall sewer 600 ft. into the ocean.

PARK IMPROVEMENT.—Los Angeles, Cal.—Plans for landscaping and improving Exposition Park are being completed by Wilbur D. Cook, Jr., Wright & Callender Bldg., Los Angeles, the work to include sunken gardens, fountains, walks, pergolas, colonnades, etc. Excavation, grading, brick, cement and artificial stone work will be required. Estimated cost, $100,000.

OIL RESERVOIRS.—Los Angeles, Cal.—The Independent Oil Producers Agency, Security Bldg., Los Angeles, are contemplating the construction of oil reservoirs to have a capacity of 4,000,000 bbls. Construction of steel or reinforced concrete is under consideration.

DREDGING.—Los Angeles, Cal.—John A. Anderson, of San Pedro, has petitioned the War Department, Lieut. Charles L. Leeds, Corps Engrs., U. S. A., Central Bldg., Los Angeles, for permission to dredge a channel 125 ft. wide by 600 ft. long in the Los Angeles municipal harbor at San Pedro.

FIRE APPARATUS.—Los Angeles, Cal.—Bids will be received until March 7 by Lorin A. Handley, City Clk., for furnishing one motor-propelled combination auto fire-engine, chemical engine and hose-wagon.

FENCE.—Los Angeles, Cal.—The U. S. Department of Animal Industry, Los Angeles, has awarded a contract to the AMERICAN STEEL POST CO., Violet St. and Santa Fe Ave., Los Angeles, for the erection of a fence on the boundary line of the United States and Mexico, from the sea to the mountains, to keep Mexican cattle from crossing the border. "Carbo" steel posts will be used.

IMPROVING PARK.—Sacramento, Cal.—Bids will be received until Feb. 27 by M. J. Desmond, City Clk., for improving South Side Park.

CANALS.—Sacramento, Cal.—A bill has been introduced into the Legislature of California, now in session, by the Senatorial Committee of Amados County, providing for the construction of a series of canals by the State through Central and Northern California. The object of the bill is to provide a permanent solution to freight competition with the railroads. The bill provides that the State Department of Engineering make surveys and report upon the feasibility of constructing a series of canals, tapping the rich farming section of the interior, and as near as possible paralleling the present rail road lines. The plan is to utilize both the Sacramento and San Joaquin rivers for almost their entire length. Laterals will be run out at favorable points and extend far back into the territory now considered inaccessible because of the absence of means of getting farm products to market. It is thought possible to extend the canal system as far south as Bakersfield, which would require a system of locks. The bill will advise that all surveys and estimates be complete as soon as possible and the report of the Engineering Department be transmitted to the Governor on or before Dec. 1, 1912, the Governor being instructed to transmit the same to the Legislature which will meet in 1913.

WHARF.—Sacramento, Cal.—The Standard Oil Co. is considering the construction of a wharf here.

RETAINING WALL.—Santa Monica, Cal.—The Carl F. Schader Seaside Terrace Co. has let a contract to FRED R. STOUT for constructing a retaining wall with staircases, electric chandeliers and balustrades.

DREDGES.—Alaska.—A contract for two steel gold dredges to work in the river beds of Alaska has been awarded to the MOORE & SCOTT IRON WORKS, Main and Howard Sts., San Francisco, Cal. The hulls will be about 100 ft. long, 40 ft. wide and 8 ft. deep.

HARBOR WORK.—Montreal, Que.—Proposed plans for an expenditure of $1,500,000 at the harbor here were approved on Feb. 16 by the Minister of Marine, Ottawa, Ont.

CEMENT.—Kingston, Ont.—The city has awarded a contract for supplying cement to the FRONTENAC LUMBER CO., of Kingston, at $1.59 per bbl. of 350 lbs.

CEMENT.—Ottawa, Ont.—Bids will be received by L. K. Jones, Secy., Dept. Railways and Canals, Ottawa, until 4 p. m., Feb. 24, for supplying about 200,000 bbls. of Portland cement required for the construction and maintenance of the various canals, to be delivered in such quantities, at such places, and at such times as may be directed. Bids may be submitted for the total quantity or for portions of the total.

SCHOONER.—Ottawa, Ont.—Bids will be received until March 1 for the construction of a schooner for the naval service. Address G. J. Desbarats, Deputy Minister, Naval Service.

BREAKWATER.—Port Burwell, Ont.—The contract for the construction of the breakwater here has been awarded by the government to M. HOGAN, St. Thomas, Ont., at $234,000.

U. S. POSSESSIONS.

STEEL CASTINGS, ETC.—Panama.—Bids will be received until March 3, by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Purchasing Officer, Isthmian Canal Comn., Washington, D. C., for furnishing manganese steel castings, wire rope, gear and milling cutters, etc., per Circular No. 622.

CAISSONS.—Hawaii.—The only bid received on Feb. 11 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of a caisson for the dry dock at Pearl Harbor, Hawaii, was that of the Union Iron Works, San Francisco, Cal., at $125,640 on Item 3, and $133,890 on Item 3a.

STEEL.—Panama.—Bids were received as follows on Feb. 17, by Capt. F. C. Boggs, Corps Engrs., U. S. A., Gen. Pur. Officer, Isthmian Canal Commission, Washington, D. C., for furnishing rod reinforcement for type D concrete piles, made up in 15-ft. lengths; 2,000 lengths head, 4,000 lengths intermediate; 2,000 lengths bottom, including cast-iron shoe; alternate bid, on the same quantities of angle reinforcement for type B concrete piles: Baltimore Bridge Co., Baltimore, alternate, $116,800; Belmont Iron Works, Philadelphia, alternate, $72,220; J. B. Kendall Co., Washington, $81,160, alternate $74,360; J. F. Pennell, 45 Broadway, New York, $84,560, alternate $83,820; United States Steel Products Export Co., New York, $83,920, alternate, $89,280; Corrugated Bar Co., Washington, $70,219, $72,232, $69,532 and $67,659, on various different propositions; McClintic-Marshall Construction Co., Pittsburg, $89,900, alternate $87,680.

FOREIGN CONTRACTS.

(To insure prompt attention, letters on consular business should be addressed to The American Consul at ————. Such letters are opened and attended to by whoever may be in charge of the office. If addressed to the consul, personally, letters are forwarded to him, unopened, should he be absent, and a delay thus intervenes.

If, in the meantime, he should have gone out of office, the matter may wholly escape attention.

HARBOR RECONSTRUCTION.—Spain.—The Spanish Government has authorized a loan of 5,000,000 pesetas, or about $1,000,000, for the reconstructon of the harbor here.

TELEPHONE CABLE.—Australia.—Bids will be received until 3 p. m., April 4, at the office of the Deputy Postmaster General, Melbourne, for supplying 10¾ miles of lead-covered paper insulated telephone cable.

RAILROAD CARS.—Chile.—Bids will be received until March 25 by the Direccion General de Obras Publicas, Santiago, for 20 box cars, 20 coal cars, 20 flat cars, three powder cars, 25 metal cars, three first-class coaches, three second-class, together with 60 pairs of wheels, and other car extras.

ROTARY CONVERTER, ETC.—Japan.—The contract has been awarded to the WESTINGHOUSE ELECTRIC & MFG. CO. by the Nikko Gas & Electric Co., of Nikko, for one 200-KVA. rotary converter, two 125-KVA. O. I. S. C. transformers and one 3-panel switchboard. The rotary will be used on street railway service. It is designed for operation at 365 volts, 2-phase, 60-cycles A. C. and 550 volts D. C.

TURBO-GENERATORS.—Brazil.—The Rio de Janeiro Tramway Light & Power Co., Rio de Janeiro, has awarded a contract to the WESTINGHOUSE ELECTRIC & MFG. CO. for two 2,500-KVA., 3,000-r.p.m., 6,300-volt, 3-phase, 50-cycle turbo-generators. The WESTINGHOUSE MACHINE CO. will furnish the turbines, which will be equipped with No. 11 Leblanc condensers. This equipment will be placed in a new station, which will operate in connection with the power company's water power station. The station will be located in the city and will be used only when the water is low and the water power plant cannot deliver its full rated capacity.

EXAMINATIONS.

*INSPECTOR OF GAS AND GAS METERS.—Trenton, N. J.—An examination for Inspector of Gas and Gas Meters will be held on March 13 by the State Civil Service Commission. Salary, $125 a month. For particulars, address Civil Service Commission, Trenton, N. J. Advertised last week.

EDITORIAL ASSISTANT.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on March 29, to secure eligibles from which to make certification to fill a vacancy in the position of Editorial Assistant in the Bureau of Mines, Department of the Interior, at a salary of from $1,200 to $1,500 a year, according to qualifications, and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interest of the service to fill such vacancy by reinstatement, transfer or promotion. The examination will consist of the subjects given below, weighted as indicated: Editing, 30 points, proof reading, 20 points; thesis, 30 points; education and experience, 20 points. Applicants must have reached their 21st birthday. Examination form 1312.

ELECTRICIAN.—Washington, D. C.—The U. S. Civil Service Commission invites attention to the fact that as a result of the examination scheduled in the Manual of Examinations to be held on March 8 for the position of Electrician in the Departmental Service, certification will be made to fill a vacancy in this position in the Bureau of Standards at $900 a year, unless it shall be decided in the interest of the service to fill such vacancy by reinstatement, transfer, or promotion. The scope and character of the examination, as well as the places at which it will be held, will be found in the Manual of Examinations revised to Jan., 1911. For filling the position in the Bureau of Standards, it is desired to secure a competent electrician qualified in the care, maintenance, and repair of station storage batteries, and skilled in "lead burning," as applied to such batteries. The Bureau has in connection with its electrical equipment 800 storage batteries, and mere experience with automobile batteries is not considered sufficient for the position. It is also desirable that the appointee shall have had experience as an interior wireman, in addition to having a good general knowledge of electrical work. Eligibles whose applications show that they have had training and experience of the kind indicated above will be considered for filling the position in the Bureau of Standards. Applicants must have reached their 20th birthday. Examination form 1800.

INDUSTRIAL NOTES.

MR. WILMOT W. BURRITT has been appointed Manager of the branch office which the Protected Metal Co., Canton, Mass., has recently opened in the Fisher Bldg., Chicago.

THE WENONA COMMERCIAL CLUB is looking for factories. The City of Wenona, Ill., is located in the corn belt and has an abundant supply of Illinois coal. It is on the Chicago & Alton and the Illinois Central, thus having excellent railroad facilities in all directions.

THE BERGER SYSTEM of "Raydiant" side walk lights, manufactured by the Berger Mfg. Co., Canton, Ohio, were installed in the new Onondaga Hotel, in Syracuse, N. Y. The hotel is an 11-story building of brick and stone. It was completed last year, Esenwein & Johnson, of Buffalo, being the Archs., and Jas. Stewart & Co., New York City, General Contractors. Sidewalk lights were installed in all the courts.

THE GLIDDEN VARNISH CO. has sent a special representative to South American to place their concrete finishes and waterproofing among the architects and engineers. Their Mr. Tornero, a native of South America, sailed on Jan. 25 to locate permanently in Buenos Aires, where he will have entire charge of the development of the concrete coating business of the Glidden Varnish Co., as pertaining to South American countries.

THE PATENT RIGHTS of the Swiss Magneto Co., it is reported, have been purchased outright by several men prominent in business and financial circles in Chicago and the East. Among those interested are: Joseph Ratzer, New York; H. P. Smith and F. J. Wende, Chicago; E. B. Clarke, Madison, Wis., and M. B. Hauxhurst, Waukegan, Ill. The consideration involved is said to be $100,000. This company has been manufacturing in its Chicago factory for about a year the small ignition device known as the "Swiss," and while for some time past entirely under control of American interests, the latter have been paying rather heavy royalties to the foreign faction. This new arrangement removes all foreign financial interest in the company. The management has contracted with the inventor for his services for a period of ten years and will also retain the various foreign engineers who have been associated with him. The "Swiss" has created considerable excitement among automobile and electrical circles. It is a high-tension magneto and possesses great electrical energy.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogs recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., 6 x 9 ins. and 9 x 12 ins.)

BELT LACING.—The Bristol Co., Waterbury, Conn. Bulletin 152. Paper; 8 × 10½ ins.; pp. 11; illustrated.

Several different styles of Bristol steel belt-lacing are shown in this bulletin.

LOCOMOTIVES. — Baldwin Locomotive Works, Philadelphia, Pa. Record 68. Paper; 9 × 6 ins.; pp. 35; illustrated.

In this pamphlet are illustrated the many designs of Mallet articulated locomotives built by this company.

HOT BLAST STOVES.—Arthur G. McKee, Rockefeller Bldg., Cleveland, O. Paper; 5½ × 7¾ ins.; pp. 11; illustrated.

The Nelson hot blast stove, described briefly in this pamphlet, has checker work constructed entirely of standard 9-in. brick. The stove lining contains less than 1% of special shapes.

BRICK AND TILE MACH[illegible]RY.—Illinois Supply & Construction Co. [illegible] Louis, Mo. Paper; 6 × 9 ins.; pp. 44[illegible]ustrated.

The machinery listed inclu[illegible]rick-making presses, presses for roofing [illegible] clay mixers and pulverizers, dry grind[illegible] pans, kilns and oil-burners for kilns u[illegible]il fuel.

SOLOR EPHEMERIS.—The [illegible] Lietz Co., 632-634 Commercial St., [illegible] Francisco, Cal. Paper; 3¼ × 5½ ins[illegible] 24; illustrated.

This little booklet is the [illegible]lar yearly publication of this firm, and [illegible]ains tables for use of surveyors and m[illegible]rs for the year 1911.

ELECTRIC HEATING.—West[illegible]use Electric & Manufacturing Co., [illegible]burg, Pa. Circular 1175. Paper; 7 [illegible] ins.; pp. 23; illustrated.

In this circular, entitled "[illegible]ric Heat in the Manufacture of Hats," [illegible]scribed a line of machinery especially [illegible]gned for shaping different sorts of hea[illegible]r in the various stages of manufacture.

LIME KILNS.—The Improve[illegible]quipment Co., 60 Wall St., New York [illegible] Paper; 6 × 9½ ins.; pp. 39; illustr[illegible]

Following a discussion of th[illegible]rinciples of lime burning, the Doherty-[illegible]ed lime kiln, the Doherty oil-fired kiln [illegible] the Doherty producer-fired kiln are de[illegible]ed. The descriptions are accompanied by [illegible]ll-scale sectional elevations.

OIL ENGINES.—August Mietz, 12[illegible] Mott St., New York City. Catalog A-4[illegible] Paper; 9½ × 6 ins.; pp. 44; illustrat[illegible]

This catalog of a well-known m[illegible]r of oil engines shows many details of [illegible]ign, in addition to the usual and exp[illegible]d data of performance, dimensions, etc. [illegible]se engines are of horizontal and vert[illegible]l types in what would be considered comparatively small sizes—2 to 200 HP.

PORTLAND CEMENT.—Marquette Cement Mfg. Co., La Salle, Ill. Paper; 9½ × 6 ins.; pp. 8; illustrated.

This pamphlet consists mainly of views of the Keithsburg bridge on the Iowa Central Ry., in the abutments and piers of which about 17,000 barrels of Marquette cement were used.

IRON CASTINGS.—Murray Iron Works Co., Burlington, Iowa. Heavy paper; 9 × 6¼ ins.; pp. 15; illustrated.

This pamphlet is composed wholly of illustrations of castings for catch basin covers, gratings, etc., manhole covers, water meter box covers, sidewalk opening gratings, lamp posts, etc.

PIPE COATING.—The American Asphaltum & Rubber Co., 600 Harvester Bldg., Chicago. Paper; 9 × 11½ ins.; pp. 4; illustrated.

This gives the results of tests made as to the electrolytic depreciation of steel covered with coal-tar and Pioneer mineral rubber pipe-coating.

ROCK AND ORE CRUSHERS.—Geo. V. Cresson Co., Philadelphia, Pa. Paper; 8½ × 11 ins.; pp. 4; illustrated.

The object of this folder is to set forth the advantages of the jaw form of crusher over the gyratory type. Both kinds are illustrated and discussed in detail as to strength, durability, wearng parts, etc.

INDUSTRIAL RAILWAYS AND EQUIPMENT.—Orenstein-Arthur Koppel Co., New York and Chicago. Paper; 8 × 11 ins.; pp. 16; illustrated.

This catalog (No. 408) relates to equipment for brick manufacturers. It includes portable tracks and a variety of dump, motor, flat and special cars adapted to this particular line of work.

GLAZED CEMENT SEWER PIPE.—Will A. Curless, 801 Lowman Building, Seattle, Wash. Paper; 8¼ × 11 ins.; pp. 4; illustrated.

This circular relates to a machine for making the Thomas concrete bell-end sewer pipe, having a glazed interior surface. The pipe is said to be in use by a number of cities in the Pacific States.

STEEL WINDOW SASH.—Trussed Concrete Steel Co., Detroit, Mich. Paper; 9 × 11 ins.; pp. 29; illustrated.

The chief features claimed for the window sash described in this booklet are strength, rigidity and maximum area of window opening. Tables and diagrams are given of the various styles of frames made by this company.

COMPRESSED AIR COAL CUTTERS.—Ingersoll-Rand Co., 11 Broadway, New York City. Paper; 6 × 9 ins.; pp. 20; illustrated.

The "Radialaxe" coal cutter is designed for undercutting in a pitching seam for shearing and mining in the middle of the seam, and for cutting out bands of clay or slate. It is, in effect, a long-stroke drill provided with a method of mounting especially adapted for the class of work it has to perform. If desired, it can be used also as a rock drill.

LIGHTING FIXTURES.—Western Electric Co., New York City. Bulletin 9635. Paper; 8 × 10½ ins.; pp. 19; illustrated.

The fixtures described in this bulletin are particularly adapted to the use of tungsten lamps. An attempt has been made to combine a fixture of graceful design, with a suspension which would eliminate shocks and jars which are fatal to the life of tungsten lamps. The [illegible]-jar device consists of three linked rings, the lower one of which is connected to the lamp socket. Some of these chandeliers are assembled and wired at the factory, and are so designed that they may be folded into small compass for shipping and for placing on the dealer's shelf.

SIGNAL APPARATUS AND MATERIALS.—General Electric Co., Schenectady, N. Y. Bulletin 4786. Stiff paper; 8 × 11½ ins.; pp. 89; illustrated.

This bulletin should prove interesting to all railway men. It describes a simple motor signal, having a signal mechanism suitable for either two or three-position operation in either upper or lower quadrant. The bulletin contains a detailed description of the signal and apparatus used, and shows exterior and interior views. In addition to the signal itself, small direct-connected generating sets, battery-charging outfits, transformers, air compressors, switchboard instruments, rheostats, etc., are described.

HOLLOW BUILDING BLOCKS.—The Ohio Clay Co., 1335 Schofield Bldg., Cleveland, Ohio. Paper; 4¼ × 8¾ ins.; pp. 8; illustrated.

The Denison interlocking hollow bricks are for walls, partitions and foundations. They are of T section, with dovetail grooving on the face to hold mortar or stucco. Each block takes the place of nine common brick.

AIR COMPRESSORS.—General Electric Co., Schenectady, N. Y. Bulletin 4810. Paper; 8 × 10½ ins.; pp. 7; illustrated.

A line of portable air compressors, driven by electric motors and having nominal capacities of from 15 to 100 cu. ft. per min., are shown. These compressors are designed for use where the installation of a piping system is not feasible. The apparatus is mounted on a three-wheel truck for convenient moving.

PRESSURE AND VACUUM RECORDERS.—Precision Instrument Co., Detroit, Mich. Catalog E. Paper; 8 × 10½ ins.; pp. 20; illustrated.

Instruments are shown in this catalog for indicating and recording furnace drafts and fluid pressures. Draft gages are shown reading to 1/10-in. of water, which can be read at some distance. The indication is given by a needle moving over a graduated scale. It is stated that no liquid is used in the construction of these gages. No description is given of the construction of the instruments shown.

BRICK SETTING MACHINE.—The American Equipment Co., Bucyrus, O. Paper; 7¾ × 10½ ins.; pp. 16; illustrated.

This machine is for setting bricks in the kilns and removing them. This work has been done mainly by hand, involving loss of time and damage to brick. The machine, which is operated from an overhead traveling crane, handles 800 to 1,000 bricks at once, and will do the work of 30 to 60 men.

ELECTRIC GENERATORS.—Fort Wayne Electric Works, Fort Wayne, Ind. Bulletin 1121. Paper; 8 × 10½ ins.; pp. 3; illustrated.

The line of generatotrs described in this little bulletin are the designs formerly made by the Northern Co., at Madison, Wis., which factory was taken over by the Fort Wayne Electric Works. The old design has been adhered to, and the main features are again described here.

ELECTRIC AUTOMOBILE APPLIANCES.—General Electric Co., Schenectady, N. Y. Bulletin 4772. Paper; 8 × 10½ ins.; pp. 11, illustrated.

This bulletin will prove of interest to all owners of electric automobiles, as it describes an outfit for charging storage batteries. A combination voltmeter and ammeter for the automobile and special lamps for lighting the car are shown. There is also a brief description of the automobile driving motor and controller.

BOILER ECONOMY.—B. F. Sturtevant Co., Hyde Park, Mass. Bulletin 187. Paper; 6½ × 9 ins.; pp. 23; illustrated.

This bulletin is a reprint of an article from "Power and the Engineer," by F. R Low, entitled "Economical Fire Room Methods." The plants described are those of the American Woolen Co., at Lawrence, Mass. Here, return tubular boilers were fired by experienced firemen after approved practice. Artificial draft is furnished by fans, and the flue gases pass though economizers.

DRAG BUCKET EXCAVATORS.—Monighan Machine Co., 2016-2030 Carroll Ave., Chicago, Ill. Heavy paper; 9 × 12 ins.; pp. 32; illustrated.

This catalog gives an excellent description of the drag or scraper bucket excavator. The various component parts, engine, hoist and boiler are fully illustrated. Several installations on various pieces of work are shown. The typography and illustrations are excellent.

ELECTRIC RAILWAY.—Stone & Webster Engineering Corporation, Boston, Mass. Cardboard; 6¾ × 9½ ins.; pp. 12; illustrated.

This is an excellently printed and attractive little booklet describing the Seattle-Everett Ry., an interurban electric line built and operated by this company. The text and illustrations are reprinted from the "Electric Railway Journal." The illustrations are handsome half-tone reproductions of photographs taken on the line of the railway.

INDUSTRIAL RAILWAYS, STEEL CARS AND BUCKETS.—H. B. Sacket Screen & Chute Co., Chicago. Paper; 10 × 6¾ ins.; pp. 64; ilustrated.

The railway system is built up of portable sections composed of rails and corrugated steel ties, with special sections for turntables and turnouts. The cars are of various types for mine, ore, concrete and general construction or industrial work; they range from 12 to 225 cu. ft. capacity. The buckets include designs with controllable discharge for handling concrete.

ELECTRICAL INSTRUMENTS.—Fort Wayne Electric Works, Fort Wayne, Ind. Bulletins 1124, 1125 and Book 3043. Paper; 8 × 10½ ins.; illustrated.

The first bulletin describes a portable instrument for calibrating watt-hour meters at the customer's premises; the second bulletin describes a single-phase induction watt-hour meter made by this company, and the third is an instruction book for installing and operating one type of watt-hour meters built by this company. It contains directions for reading, adjusting and connecting up the meter.

LIST OF CONTRACTS PENDING.

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

Bids close.		Noted in issue of
2-24*	Earthwork, Belle Fourche, S. Dak. (S)	12-29
3-10	Water and sewer work, Fort Andrews, Mass. (P. & S.)	2-16
3-14*	Pontons, Rock Island, Ill. (P.&S.)	2-16
3-15*	Tunnel, Bonanza, Colo. (S.)	2- 9
3-16	Storehouse, Fort Strong, Mass. (P. & S.)	2-16
3-18	Quay wall extension, Portsmouth, N. H. (S.)	2-23
3-25	Dredging, Boston, Mass. (S.)	2-23

Light, Heat and Power Plants.

Bids close.		Noted in issue of
2-24	Street lighting supplies, Cleveland, Ohio	2-23
2-27	Conduits, etc., South Pasadena, Cal.	2-23
2-27	Wire, Wash., D. C.	2-23
2-28	Electric light plant, Parkersburg, W. Va.	2-16
2-28	Elec. light plant, Parkersburg, W. Va.	2-16
3-1	Gas plant, Monterey, Mex	1-26
3- 1	Engines, generators, Strathcona, Alta.	2- 9
3- 1	Power plant, Fort Mason, Cal.	2-16
3- 1	Power equipments, San Francisco, Cal.	2-23
3- 6	Heating and vent., New York	2-23
3- 6	Steam boilers, New York	2-23
3- 7	Lighting system in post-office, Keokuk, Iowa.	2-16
3- 8	Fixtures, Cleveland, Ohio	2- 2
3- 9	Elec. equipment, New York	2-23
3- 9	Electrical equipment, New York.	2-23
3-14*	Hydraulic turbines, Phoenix, Ariz.	2-23
3-14*	Electric apparatus, Phoenix, Ariz.	2-23

Bridges.

Bids close.		Noted in issue of
2-23	Bridge, Celina, Ohio	2-23
2-23	Bridge, Marinette, Wis	2-23
2-24	Bridge, Indianapolis, Ind.	2-23
2-25	Bridges, Clinton, Ill.	2-23
2-25	Bridges, Dauphin, Man.	2-16
2-27	Bridge, Yankton, S. Dak.	2-16
2-27	Bridge, Lorain, Ohio	2- 9
2-27	Bridge, Jacksonville, Fla.	2-23
3-21	Bridge, Albany, N. Y.	2-23
2-28	Bridge, Dundas, Minn.	2-23
2-28	Bridge, Springfield, Ohio	1-26
2-28	Bridge, Boston, Mass.	2-16
3- 1	Superstructure, Danville, Va.	2-16
3- 2*	Bridge, Kingston, N. Y.	2- 2
3- 4	Bridge, Lanark, Ont.	2-16
3- 6	Bridges, White Plains, N. Y.	2-16
3- 6	Draw-bridge, Port Clinton, Ohio.	2-16
3- 6	Arches, etc., Los Angeles, Cal.	2- 2
3- 6	Bridge, South Pasadena, Cal.	2-23
3- 7*	Viaduct repairs, Troy, N. Y.	2-23
3- 7	Bridges, Janesville, Wis.	2-16
3- 9	Bridges, Vincennes, Ind.	2-23
3-11	Superstructure, Hamilton, Ohio.	2-23
3-15	Bridge, Clinton, Ark.	2-16
4- 3	Bridges, Idagrove, Iowa	2-23

Buildings.

Bids close.		Noted in issue of
2-24	School, Indianapolis, Ind.	2- 9
2-24	Bldg., Wilkes-Barre, Pa.	2-16
2-24	Library bldg., North Manchester, Ind.	2-16
2-24	Alterations in hospital, New York, N. Y.	2-16
2-25	Building, Portland, Ore.	2-23
2-25	Reconstructing school, Providence, R. I.	2-23
2-27	Public building, Listowel, Ont.	2-23
2-27	School, Hannastown, Pa.	2-23
2-27	High school, Pittsburg, Pa.	2-16
2-27	Improv. to high school, Baltimore, Md.	2-16
2-28	Hospital, Fort Missoula, Mont.	2- 9
2-28	Public building, Tilsonburg, Ont.	2-23
2-28	School, West Jefferson, Ohio.	2-23
2-28	School bldg., Medford, Okla.	2-23
2-28	Edifice, Shenandoah, Iowa	2-23
3- 1	Public bldg., Mitchell, Ont.	2-23
3- 1	Church, Pendleton, Ore.	2- 9
3- 1	School, Cleveland, Ohio	2- 9
3- 1	School, Glidden, Wis.	2- 2
3- 2	School, Bedford, Ind.	2-16
3- 2	Building, New York, N. Y.	2-23
3- 3	School, Lakewood, Ohio	2-23
3- 3	School, Ashland, Ore.	2- 9
3- 6	School, Cleveland, Ohio	2-23
3- 7*	Hospital, New London, Conn.	2- 9
3- 8	Post-office, Brookhaven, Mass.	2- 2
3- 8	School, Lucasville, Ohio	2-23
3-15	Edifice, Grand River, Iowa	2-23
3-15	Bldg., Merril, Wis.	2-16
3-15*	Erection of bldgs., Fort Andrews, Mass.	2-16
3-17*	Barrack, Fort Monroe, Va.	2-23
3-22*	Buildings, Tompkinsville, N. Y.	2-23
4-15	Plans, Havana, Cuba	10-20

Water-Works.

Bids close.		Noted in issue of
2-24*	Earthwork, Belle Fourche, S. Dak.	12-29
2-25	Water-works, Battle Creek, Neb.	2-16
2-27*	Water plant, Akron, Pa.	2-16
2-27	Water main, Euclid, Ohio	2- 9
2-27	Water-works improv., Gainesville, Ga.	2-16
2-28*	Reservoir, etc., Ft. Terry, N. Y.	2- 2
2-28	Pipe, etc., St. Catherines, Ont.	2-16
2-28	Pump-house, etc., Corydon, Iowa.	2-23
3- 1	Water mains, New York	2-23
3- 1*	Water meters, Dallas, Tex.	2-23
3- 1*	Water-works, Apple River, Ill.	2-16
3- 1	Pump, etc., Coraopolis, Pa.	2-16
3- 1	Completing dam, etc., Green River, Utah	2- 2
3- 1	Water-works, Atlantic, Iowa	1- 5
3- 1	Water supply, Chaffee, Mo	2- 9
3- 2	Reservoir, etc., Harlowtown, Mont	2-16
3- 2*	Pipe, Augusta, Ga.	2-23
3- 2	Water mains, Tracy, Minn.	2-23
3- 3	Pumping engine, Mount Clemens, Mich.	2-23
3- 3	Gate valves, etc., Victoria, B. C.	2- 9
3- 6	Tank and Tower, Bridgewater S. Dak	2- 9
3- 6	Main, Sheridan, Wyo.	2- 2
3-7*	Filters, etc., Ogdensburg, N. Y.	2- 9
3- 7	Water-works, Rockmart, Ga.	2-16
3- 7	Well, McComb, Miss.	2-16
3- 7	Water tower, Seattle, Wash.	2-23
3-10	Water wheels, Phoenix, Ariz.	2-23
3-10	Water softening plant, Owensboro, Ky.	2-23
3-10	Diversion channel, Klamath Falls, Ore.	2-16
3-10	Water mains, Fort Andrews, Mass	2-16
3-10	Well, Vermillion, S. Dak.	2-16
3-10*	Reservoir embankment, Hornell, N. Y.	2-16
3-11	Water mains, Troy, Ohio	2-16
3-13	Pipe, Pierpont, S. Dak.	2-23
3-20*	Water-works, Bristol, Pa.	2-23
4- 1	Water-works, West Telford, Pa.	2- 2
4- 3*	Water main, Galveston, Tex.	2-23
4-15	Storage dam, Wells, Nev.	2-23

Sewers.

Bids close.		Noted in issue of
2-24	Sewers, Hastings, N. Y.	2- 2
2-27	Sewers, New York, N. Y.	2-16
2-27	Sewers, Oakley, Ohio	2-16
2-27	Cleaning catch basin, Boston, Mass.	2-23
2-28	Sewers, Cleveland, Ohio	2- 2
2-31	Sewers, Solvay, N. Y.	2- 2
3- 1	Sewers, New York, N. Y.	2-23
3- 1	Sewers, Buffalo, N. Y.	2-23
3- 3	Sewers, etc., Vancouver Barracks, Wash.	2-23
3- 3	Sewers, Washington, D. C.	2-23
3- 3*	Sewers, Watertown, N. Y.	2- 9
3- 3*	Sewers, Bement, Ill.	2-16
3- 7*	Sewers, Bridgeton, N. J.	2-16
3- 9*	Sewers, Pocatello, Idaho	2-16
3-14*	Sewer, Atlanta, Ga.	2-16
3-16	Sewer system, Rector, Ark.	2- 2
3-20*	Sewer system, Bristol, Pa.	2-23
3-20	Sewer, Fort Washington, Md.	2-23
3-21	Sewer, Grand View, Ohio	2-23
3-21*	Sewers, Moundsville, W. Va.	2-23
7- 3	Sewage disposal system, San Jose, Cal.	2-23

Streets and Roads.

Bids close.		Noted in issue of
2-23	Rock, etc., New York, N. Y.	2-23
2-24	Paving, Buffalo, N. Y.	2-23
2-24	Paving, etc., New York, N. Y.	2-23
2-24	Paving, etc., Chicago, Ill.	2-23
2-24	Paving, Wapakoneta, Ohio	2-16
2-24	Road work, Cincinnati, Ohio	2- 2
2-24	Road Improvement, Cincinnati, O.	2- 9
2-25	Grading, Lisbon, Ohio	2- 9
2-25	Reconstructing, St. Louis, Mo.	2-23
2-27	Sidewalks, etc., Ocean Park, Cal.	2-23
2-27	Grading, etc., Easton, Md.	2-23
2-27	Highways, Albany, N. Y.	2- 9
2-27	Paving, etc., Lakewood, Ohio	2- 9
2-27	Paving, Atlantic City, N. J.	2- 2
2-27	Road oil, Boston, Mass.	2-16
2-28	Paving, Newbern, N. C.	2- 9
2-28	Walks, etc., Fort Niagara, N. Y.	2- 9
2-28	Sidewalks, Cincinnati, Ohio	2-23
3- 1	Paving, Louisville, Ky.	2-23
3- 1	Paving, etc., New York, N. Y.	2-23
3- 1	Highway impvts., Portland, Ind.	2- 9
3- 1*	Macadam road, Madison Barracks, N. Y.	2- 2
3- 1*	Asphalt, Winnipeg, Man.	1-26
3- 1	Paving, Muncie, Ind.	2-16
3- 1	Paving, etc., Norfolk, Va.	2-16
3- 2	Paving, Richmond, Ind.	2-23
3- 2	Grading, etc., Wilson, Pa.	2-23
3- 4	Paving, Sweet Water, Tex.	2-16
3- 6	Road construction, Rockville, Ind.	2-16
3- 6	Road construction, Jeffersonville, Ind.	2-16
3- 6	Stone roads, Fowler, Ind.	2-16
3- 6	Road construction, Spottsylvania, Va.	2-16
3- 6	Road construction, Huntington, Ind.	2-16
3- 6	Culverts, etc., Plainfield, N. J.	2-23
3- 6	Paving, Aliquippa, Pa.	2-23
3- 6	Road, Williamsport, Ind.	2-23
3- 6	Road, Fowler, Ind.	2-23
3- 7	Road, Rockville, Ind.	2-23
3- 7	Grading, etc., Wooster, Ohio	2-23
3- 7*	Paving, Monroe, Wis.	2-23
3- 9	Cement, Savannah, Ga.	2-16
3- 9	Road construction, Jackson, Miss.	2- 9
3-10	Culvert, Cincinnati, Ohio	2-23
3-10	Road, La Fayette, Ind.	2-23
3-11	Roads, Brazil, Ind.	2-23
3-11	Road construction, Brazil, Ind.	2-23
3-13	Grading, Worthington, Minn.	2-23
3-18	Road, Bowling Green, Ohio	2-23
3-21*	Walks, etc., Fort Monroe, Va.	2-23
4- 1	Asphalt, Logansport, Ind.	2-16

Miscellaneous.

Bids close.		Noted in issue of
2-23	Lead, New York	2-23
2-24	Cement, Sand, Gravel, New York.	2-23
2-24	Embankment, Murphysboro, Ill.	2-23
2-24	Tugboat, Portland, Ore.	2-23
2-24	Cement, Ottawa, Ont.	2-23
2-24	Street cleaning machines (Garbage), Boston, Mass.	2-23
2-24	Limestone, Minneapolis, Minn.	2-23
2-24*	Fire escapes, White Plains, N. Y.	2- 9
2-24	Lock gate recess covers, Panama, (U. S. Poss.)	2- 2
2-24	Levees, dredging, Oakland, Cal.	2-16
2-25	Machinery for gate valves, etc., Panama (U. S. Poss.)	1- 5
2-25	Ordnance storehouse, Fort Constitution, N. H.	2- 9
2-25	Ditches, South Bend, Ind.	2-23
2-25	Cement, Corpus Christi, Tex.	2-23
2-25	Dredging, Providence, R. I.	2-23
2-27	Improving park, Sacramento, Cal.	2-23
2-27	Ditch, Martinsville, Ind.	2-23
2-27	Field wire, Washington, D. C.	2-16
2-27	Fire apparatus, New York	2-16
2-28	Sand, Leavenworth, Kan	2- 9
2-28	Elec. pumping machinery, Australia (Foreign)	12-29
2-28*	Locktender's dwelling, Cincinnati, Ohio	2- 2
3- 1	Asphalt, Winnipeg, Man.	2- 2
3- 1*	Breakwater, etc., Milwaukee, Wis.	2- 2
3- 1	Bath house, Hot Springs, Ark	1-12
3- 1	Ventilating apparatus, So. Africa (Foreign)	1-19
3- 1	Asphalt, trap rock, etc., N. Y.	2-23
3- 1	Culvert pipe, Armour, S. Dak.	2-23
3- 1	Schooner, Ottawa, Ont.	2-23
3- 1	Watering streets, etc. (garbage), Boston, Mass.	2-23
3- 2	Levees, Floodgates, Brenham, Tex	2- 9
3- 2	Railroad work (Railways)	2-16
3- 3	Retaining wall, Cincinnati, Ohio.	2-16
3- 3	Cement, Leavenworth, Kan.	2-16
3- 3	Motor car for Tramway, Winnipeg, Man.	2-16
3- 3	Metal vault linings, etc., New York.	2-16
3- 3	Steel castings, etc. Panama (U. S. Poss.)	2-23
3- 3	Garbage disposal (Garbage), Troy N. Y.	2-23
3- 6	Granite steps, Los Angeles, Cal.	2-16
3- 6	Elevator, Los Angeles, Cal.	2-16
3- 6	Steel dredger chains, Argentine Republic (Foreign)	2- 9
3- 6	Vacuum cleaning system, Youngstown, Ohio	2- 9
3- 7	Ice piers, Cincinnati, Ohio	2- 2
3- 7	Storehouse, Rock Island, Ill.	2-16
3- 7	Ferryboat, Boston, Mass.	2-16
3- 7	Fire apparatus, Los Angeles, Cal.	2-23
3- 8	Wharf, Ottawa, Ont.	2-16
3-13	Steel ceilings, Columbus, Ohio.	2-16
3-13	Disposal plant, McKees Rocks, Pa. (garbage)	2-23
3-14	Roofs, etc., Des Moines, Ia.	2-16
3-14	Roof, Des Moines, Ia.	2-16
3-14*	Pontons, Rock Island, Ill.	2-16
3-14	Wireless telegraphy installation, Australia (Foreign)	1-19
3-14	Elec. light plant, Roumania (Foreign)	2- 9
3-14	Torpedo boats, Washington, D. C.	2- 9
3-15*	Tunnel, Bonanza, Colo.	2- 9
3-15	Mooring stones, Portland, Me.	2- 9
3-15*	Dredging, rock removal, New York	2-16
3-16	Ditch, etc., Rector, Ark.	1-26
3-16*	Additions to storehouse, Fort Strong, Mass.	2-16
3-17	Motor trucks, Toronto, Ont.	2-16
3-17*	Extending jetties, New Orleans, La.	2-23
3-23*	Dredging, Portland, Me.	2-23
3-24*	Rock railway material, Panama, (U. S. Poss.)	1-26
3-25	Railroad cars, Chile (Foreign).	2-16
3-25	Dredging, Boston, Mass.	2-23
3-30	Dams, etc., Panama (U. S. Poss.)	1-10
4- 1	Bridge, Spain (Foreign)	2- 2
4- 1	Cruisers, destroyers, Ottawa, Ont	2- 9
4- 3	Copper roof, Franklin, Ind.	2-16
4- 4	Cable Australia (Foreign)	2-23
4-20	Hospital, etc., (plans and designs) Argentine Republic (Foreign)	1-12
8- 1	Designs, etc., for monument, Cincinnati, Ohio	2- 9

Examinations.

Examination date.		Noted in issue of
2-23	Aid in Anthropology, Washington, D. C.	1-26
2-23	Editorial Clerk, Wash., D. C.	2- 9
3- 8	Civil Engineer, Wash., D. C.	2- 9
3-13*	Inspector of Gas and Gas-meters, Trenton, N. J.	2-23
3-29	Editorial Assistant, Wash., D. C.	2-23

SWITCHBOARDS.—General Electric Co., Schenectady, N. Y. Miscellaneous Bulletins. Paper; 8 × 10½ ins.; illustrated.

Bulletin 4749, entitled "Alternating-Current Switchboard Panels," shows the sectionalized type developed by this company. The panels are in three sections and the pages of the bulletin are sectionalized so that the reader may have before him a picture of any complete panel desired, together with a complete description of the equipment.

Bulletin 4763 is a new edition of an older pamphlet on "Isolated Plant Direct-Current Combination Generator and Feeder Panels." The title is self-explanatory.

Bulletin 4782 illustrates and describes three-panel high switchboards for the exciter connections of alternating-current generators where separate control of the exciter units is desired.

Bulletin 4807 shows panels for use in small isolated plants containing but one generator.

In Bulletin 4809 is described a small oil switch for use on voltage up to 4,500. These are made in non-automatic and automatic types with overload and short-circuit relays.

ROCK DRILL ACCESSORIES.—Ingersoll-Rand Co., New York City. Paper; 6 × 9 pp. 44; illustrated.

This pamphlet describes the standard line of Ingersoll-Rand drill steels, and the other accessories entering into a complete drill equipment. Tripods, columns, quarry bars and gadders are described and illustrated in detail, with tables of standard sizes and prices. Air and steam hose varying in diameter from ¾ to 3 ins., and of several kinds of covering, are described and the advantages of each given. Hose couplings, menders, valves, etc., are illustrated and described. The last 8 pages are devoted to "Rock Drill Bits," by T. H. Proske, reproduced from the "Mining and Scientific Press."

For other Proposal Advertisements see pages 51, 52, 53, 54, 56 of Advertisements and Construction News page 92.

SANITARY AND SURFACE DRAINAGE SEWERS.

Moundsville, West Virginia.

Sealed bids will be received by Oscar B. Bonar, City Clerk, until the twenty-first (21st) day of March, 1911, at the hour of 10 o'clock a. m., and then publicly opened and read, for the furnishing of all materials and laying, complete, including trenching, backfilling, etc., 26 miles of sewers, varying in size from 6" to 36" in diameter, together with 420 Manholes, 6 Lampholes, 8 Flushtanks, 115 Inlets and Catch-basins, and 22 tons of cast-iron pipe.

Bids will be received for both vitrified pipe and monolithic concrete for all sewers, 24" in diameter and larger.

The depths of trenches vary from 5 feet to 32 feet.

Specifications, Instructions to Bidders and blank forms of bidding sheets may be obtained, and plans and profiles may be seen at the office of Oscar B. Bonar, City Clerk, Moundsville, West Virginia, or at the office of Chas. E. Collins, Consulting Engineer, Drexel Building, Philadelphia, Pa.

All proposals shall be made on the blank forms furnished by the city for this purpose and shall be accompanied by a certified check upon the First National Bank, of The City of Moundsville, West Virginia, and drawn to the order of Oscar B. Bonar, Clerk of the City of Moundsville, West Virginia, for the sum of One thousand dollars ($1,000).

The City Council reserves the right to reject any and all bids.

J. M. WILLIAMSON, Mayor.
OSCAR B. BONAR, City Clerk.

WATER METERS.

Dallas, Texas.

Sealed bids will be received at the office of the undersigned until 3 o'clock P. M., March 1, 1911, for furnishing f. o. b. cars, Dallas, Texas, water meters in sizes from ⅝-in. to 1-in. inclusive, in lots of 5,000, 7,500 and 10,000.

Every bid must be accompanied by a certified check in the sum of $500.00, payable to the Treasurer of the City of Dallas as security that if his or their bid be accepted, a contract will be entered into within 10 days after receipt of written notice from the Board of Commissioners so to do. Said check to be forfeited and surrendered to the City of Dallas as an agreed amount of liquidated damages in case of failure to enter into a contract. All unsuccessful bidders' check will be returned upon the awarding of the contract to the successful bidder.

Specifications are on file in the office of City Secretary, and may be had on application. The City reserves the right to reject any or all bids. Envelopes must be marked "Bids on Water Meters."

J. B. WINSLETT, City Secy.

VIADUCT REPAIRS.

OFFICE OF THE BOARD OF CONTRACT AND SUPPLY,
Room 21, City Hall, Troy, N. Y.,
Jan. 30, 1911.

Sealed proposals for repairs to the "Rensselaer Street Viaduct," crossing the Boston and Maine Railroad tracks at Rensselaer Street, in the City of Troy, N. Y., will be received by any member of the Board of Contract and Supply until Tuesday, March 7, 1911, at 11 o'clock a. m.

The work includes the removal and rebuilding of parts of the abutments and pier; the cutting out of members of the bridge and replacing them with new ones; reinforcing existing members; new arrangement of the fixed and expansion end bearing shoes, etc., involving approximately the following quantities of materials and work:

135,000 pounds of new structural steel.
4,400 pounds of reinforcing steel.
90 cu. yds. old masonry to be removed.
65 cu. yds. concrete in piers and abutment.
37 cu. yds. cinder concrete in sidewalks.
514 sq. yds. wood block pavement.

And all other labor and materials to complete the work in accordance with the plans and specifications.

At the time above mentioned, and at the rooms of the Board of Contract and Supply, Room No. 21, City Hall, the proposals for said work will be received, publicly opened and officially declared by said Board. A certified check, payable to the order of the City Treasurer, for five per cent. of the amount of each proposal, must accompany each bid.

Specifications for the above can be seen at this and the City Engineer's office, subject to the right of the Board to reject any and all bids.

By order of the Board.

JAMES M. RILEY, Secretary.

WATER MAIN.

Galveston, Texas, Feb. 17, 1911.

Sealed proposals will be received by the Board of City Commissioners, at the office of the City Secretary, until 12 o'clock m., Monday, April 3, 1911, and opened at the first regular or special City Commissioners' meeting thereafter, for furnishing of all material and doing all the work necessary for the complete installation of a water main, ready for use, along the Causeway, from Virginia Point to Galveston Island, requiring approximately 10,766 lineal feet of 30-inch cast-iron pipe.

Each proposal must be submitted in duplicate and accompanied by a certified check, payable to the order of the City Secretary, in the sum of five per cent. of amount of bid, or the same will not be considered.

All work to be done in accordance with and agreeably to plans, details and specifications therefor prepared by the City Engineer, and which may be seen at his office in the City Hall, Galveston, Texas. Copies of plans and specifications may be obtained from the City Engineer by making a deposit of $10.00 with the City Secretary.

Bond in the sum of thirty per cent. of amount of the contract price will be required for the faithful performance of the work; sureties thereon must be satisfactory to the Board of City Commissioners.

Payments to be made as provided in specifications. The total contract price to be paid in Galveston City, five per cent. Duplicate Water Main bonds.

The Board of Commissioners reserves the right to reject any and all bids, or to accept the proposal deemed by them to be for the best interest of the City.

Bidders will not be permitted to modify or withdraw their proposals after the same have been submitted for consideration of the Board of Commissioners, and the right is reserved to waive technical defects if in the interest of the City.

H. C. LANGE,
Commissioner of Water Works and Sewerage.
A. T. DICKEY,
City Engineer.
JOHN D. KELLEY,
City Secretary.

SEWERAGE AND SEWAGE DISPOSAL.

Bristol, Pa.

Sealed proposals, addressed to the Borough Council of the Borough of Bristol, Bucks County, Pennsylvania, marked Proposals for "Sewerage System," will be received until 12 o'clock noon, March 20th, 1911, for furnishing materials and constructing a complete system of sewerage and disposal plant, comprising the following:

The system consists of approximately ten (10) miles of sewers, 8 inches to 24 inches in diameter.

Pump House.
Engines.
Pumps.
Pump Well and Disposal Works.

Bids will be received for the entire work or any portion thereof.

Plans may be seen and specifications and blank forms of proposal procured by applying to the office of the Borough Surveyor, No. 209 Radcliffe Street, Borough of Bristol, Bucks County, Penna.

A certified check for $500, payable to the order of the Borough Clerk of Bristol, Pa., must accompany each bid.

The Borough Council of the Borough of Bristol reserves the right to reject any or all bids or to accept any bid for the whole or any portion of the work.

LOUIS SPRING,
GUSTAV A. RATHKE,
DR. A. S. WILSON,
GEO. W. STRAUSER,
JOSEPH R. GRUNDY,
WM. H. BOARDMAN, Chairman,
Engineer, Committee.
426 Walnut St.,
Philadelphia, Pa.

WATER-WORKS.

Apple River, Ill.

Sealed bids for the construction of a system of Water-Works for the Village of Apple River, in the County of Jo Daviess and the State of Illinois, will be received by the Village Clerk up to the hour of Seven O'clock P. M. on the first day of March, 1911, according to plans and specifications now on file in the office of the Village Clerk, copies of which may be obtained on application. The right to reject any or all bids so reserved.

LESTER A. VARTY,
GEO. GUY, Village President.
Village Clerk,
Apple River, Ill.

FURNISHING PIPE.

DEPARTMENT PUBLIC WORKS,
Augusta, Ga., February 17, 1911.

Sealed proposals, addressed to The City Council of Augusta, Georgia, will be received by The Water Works Committee until 4 p. m., Thursday, March 2, 1911, for furnishing, f. o. b. cars, Augusta, Ga.:

1,000 lineal feet 12" pipe.
350 lineal feet 10" pipe.
2,400 lineal feet 8" pipe.
8,000 lineal feet 6" pipe.

All Class C Cast Iron pipe, standard specifications, together with the necessary specials to lay above pipe.

Payments will be made in cash.

Delivery to commence within 30 days from receipt of order, and to be completed within 30 days thereafter.

The City reserves the right to reject any or all bids.

NISBET WINGFIELD,
City Engr. and Comr. Pub. Wks.

U. S. ENGINEER OFFICE, Room 325, Custom House, New Orleans, La., Feb. 15, 1911.—Sealed proposals for extending the jetties at Southwest Pass, Mississippi River, will be received at this office until 11 a. m., March 17, 1911, and then publicly opened. Information on application. LANSING H. BEACH, Lt. Col., Engrs.

REINFORCED-CONCRETE PIPE FOR TORONTO MAIN DRAINAGE.

Toronto, Ont.

Tenders will be received [illegible] on Tuesday, March 14th, 1911, for

3,400 linear feet of 66 [illegible] Reinforced Concrete Pipe.
9,728 linear feet of 66 [illegible] Reinforced Concrete Pipe.

Plans, specifications, [illegible] of tender and conditions relating [illegible] tendering as prescribed in City By-law [illegible] may be obtained from the Main Drainage Department, Office of City Engineer, Toronto.

The lowest or any tender not necessarily accepted.

G. R. GEARY ([illegible]or),
Chairman, Board of Control.
City Hall, Toronto,
February 20th, 1911.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., Feb. 16, 1911.—Sealed proposals will be received in this office until 3 o'clock P. M. on the 30th day of March, 1911, and then opened, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. Post Office at Alliance, Ohio, in accordance with the drawings and specifications, copies of which may be obtained from the Custodian of site at Alliance, Ohio, or at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

FORT MONROE, VA., Feb. 16, 1911.—Sealed proposals, in triplicate, will be received until 10 A. M., March 17, 1911, at Office of the Constructing Quartermaster, Ft. Monroe, Va., for construction of Barrack for Enlisted Specialists, at Ft. Monroe, Va., including plumbing, heating and electric wiring and fixtures. For convenience of bidders in and near New York plans and specifications may be seen in Office Chief Quartermaster, Department of the East, Governor's Island, New York. Deposit of certified check for $50.00 required as guaranty return of plans and specifications. Bidders on proposals must state name of manufacturer supplying their material. Information on application. The United States reserves the right to accept or reject any or all proposals, or any part thereof. R. B. McBRIDE, Capt. and Q. M., U. S. A., Constg., Q. M.

SEALED PROPOSALS will be received at the Office of the Lighthouse Inspector, Tompkinsville, N. Y., until 3 p. m., March 22, 1911, and then opened, for furnishing the materials and labor of all kinds necessary for the construction of a brick dwelling, with reinforced concrete floors, for two keepers at Staten Island Light-Station, Richmond, N. Y., in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to the Lighthouse Inspector, Tompkinsville, N. Y. The right is reserved to reject any or all bids, and to waive any defects.

U. S. ENGINEER OFFICE, 537 Congress St., Portland, Me., February 20, 1911.—Sealed proposals for dredging in Camden Harbor, Maine, will be received at this office until 12 m., March 23, 1911, and then publicly opened. Information on application. W. E. Craighill, Lieut.-Col. Engrs.

FORT MONROE, VA., February 20, 1911.—Sealed proposals in triplicate will be received until 10.00 a. m., March 21, 1911, for constructing concrete walks, macadam roads, etc., around new buildings at Fort Monroe, Va. Information on application. The United States reserves the right to accept or reject any or all bids or any part thereof. R. B. McBRIDE, Captain and Quartermaster, U. S. A., Constructing Quartermaster.

PAVING.

Monroe, Wis.

The City of Monroe, Wisconsin, will let on March 7, 1911, contract for 5,057 sq. yds. of paving.

Address W. G. Kirchoffer, of Madison, Wisconsin, for plans and specifications.

Miscellaneous Wants

WANTED—Representative calling on Architects and Engineers in New York City by Manufacturing Company having a highly remunerative line of Specialties on commission basis. Address "P. A. 8," Engineering News, New York. 8-1t

WANTED—Building Supply Company to represent a manufacturer of interior and exterior Specialties in Eastern States. To a firm with good connections among Architects, Engineers and Contractors liberal and remunerative arrangement will be made. Address "R. A. 8" Engineering News, New York. 8-1t